May, 1960

the AMERICAN SCHOOL BOARD JOURNAL

a periodical of school administration

facilities designed for team teaching

(see page 38)

Why the Bums rushed from Ebbets Field

Back in 1916, the old Brooklyn Robbins won the National League pennant. It was their fourth. Ebbets Field was then only three years old and had 31,902 seats—plenty of room for the Flatbush faithful. But, when the modern-day Dodgers erupted into a powerhouse, winning five pennants from 1949 to 1956, the seating situation went sour. The Dodgers played the New York Yankees five times in the World Series, and while the famed "house that Ruth built" bulged with 67,000 paying customers, only half that number squeezed through the turnstiles at Ebbets Field. And the greatest "catastrastroke" was that Ebbets Field couldn't be expanded. Finally, after 44 years in the same old apple orchard, the Dodgers moved. Advanced planning might have saved Ebbets Field. If you're getting ready to build a new stadium or to remodel your present one, be sure to look into USS AmBridge Standard Steel Stadiums–they're engineered to grow with your needs. Our rugged steel grandstands expand to size quickly and economically, and they can be **moved** if necessary. Incidentally, for facilities under the stands, watertight steel plate decking makes a perfect roof for lockers, showers, classrooms, office space and concession booths. Get the details in our 24-page booklet on AmBridge Standard Steel Stadiums. Write to our Pittsburgh Office for your free copy.

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Indian Trails Elementary School, Highland Park, Ill. Architects: Perkins & Will, Chicago. Photo by Hube Henry, of Hedrich-Blessing, Chicago, courtesy of Unit Structures, Inc., Peshtigo, Wis.

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the AMERICAN SCHOOL BOARD JOURNAL

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May, 1960 Vol. 140, No. 5

Imaginative Engineering Puts to Work on *DAYLIGHT*

Mike Best and Ed Kralovec, mechanical engineers on the Madonna school, shown discussing job details with two of their colleagues.

Kralovec & Best, consulting engineers, went one step further in their heat and ventilation design for the new Madonna High School, Chicago — they applied pneumatic control to skylight louvers.

To meet the lighting requirements of the combination auditorium-gymnasium, architect C. I. Krajewski used a system of sky domes equipped with adjustable light dampers. How to control the dampers quickly and efficiently for change-over from plenty of daylight for gym activities to total blackout for movies, etc., was the problem presented to the consulting engineer.

Kralovec & Best's solution was — twenty-nine 4-inch powerstroke piston damper motors — one for each of

Sky domes, inside and out. Each contains a set of light dampers, all of which operate simultaneously when darkness for movie showings is desired in the combination auditorium-gymnasium.

(For more information from advertisers, use the postcard on page 65)

Powers Pneumatic Control

MADONNA HIGH SCHOOL
Chicago, Ill.
Architect: C. I. Krajewski, Chicago
Consulting Engineers:
Kralovec & Best
Chicago
Heating Contractor:
Windsor Heating Co.
Chicago

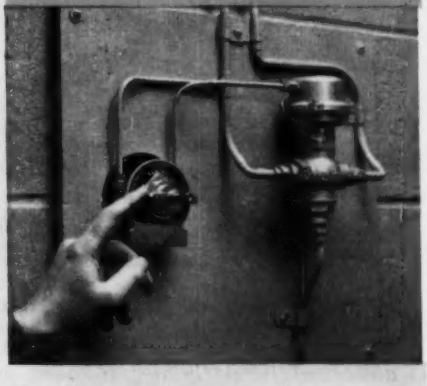
the sky dome louvers on the roof — energized instantly from a single Powers pneumatic selector switch in the projection room. Turning the switch activates air pressure at 15 psi. through a Powers Series 500 Pilot Valve to the motors to close the light louvers. When the switch is turned off, pressure is released . . . and the louvers swing open to admit light.

Pneumatic control of daylight in Madonna school is fast, easy and quiet — a definite convenience for the projectionist or instructors, an operational bargain for the school, maintenance-wise.

The complete heating system, as specified by Kralovec & Best, includes two hot water converters controlled at fixed temperatures. Individual classrooms are heated and ventilated by unit ventilators, controlled on the standard day-night cycle. Corridors, rest rooms, storage and locker rooms employ direct radiation controlled by Powers Day-Night room thermostats. For extra safety and comfort, hot water to all showers is controlled by means of a Powers Hydroguard Thermostatic Shower Control.

Here, then, is how imaginative engineering applied to pneumatic control can have unusual — but practical — results in an efficient, low cost system.

A single pneumatic selector switch in the projection room actuates 29 sets of light louvers through 29 individual powerstroke motors.



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Your JOURNAL *for May...*

With the coming of spring, board members begin to direct their attention to the teacher supply and demand situation for the forthcoming school year.

Your JOURNAL for May features a preview (pg. 17) of the NEA Research Division's "Thirteenth Annual Supply and Demand Report." This first available review of what the September picture will be like on the national level as a guide to your local planning indicates (1) a general increase in the number of teachers for 1960–61, and (2) a growing ratio of graduating teachers trained for mathematics and science instruction. The most unfavorable aspect is the continuing drop of elementary school teachers to meet the increasing demand.

In this same area, the prevailing teacher shortage has caused more and more districts to turn to teacher recruitment programs. For a report on several successful recruitment programs that are now in operation in districts throughout the country, our discussion (pg. 13) analyzes a variety of approaches for your help.

Other features of note:

1. With the problem of discipline so prevalent today, you won't want to miss a timely analysis (pg. 20) of the discipline problem in one district and how the board used a committee approach in formulating a discipline policy.

2. One of the first complete electronics technology laboratories for secondary schools financed under NDEA funds is now in operation at Levittown, N. Y. For an illustration of what is being done, read the thorough discussion (pg. 25) of the courses, specifications, etc., of this lab that might serve as guiding principles for you in planning or considering similar equipment.

These articles, as usual, are what we feel are the highlights, but we hope you'll make it a point to review the entire issue, and don't forget the regular departments, too.

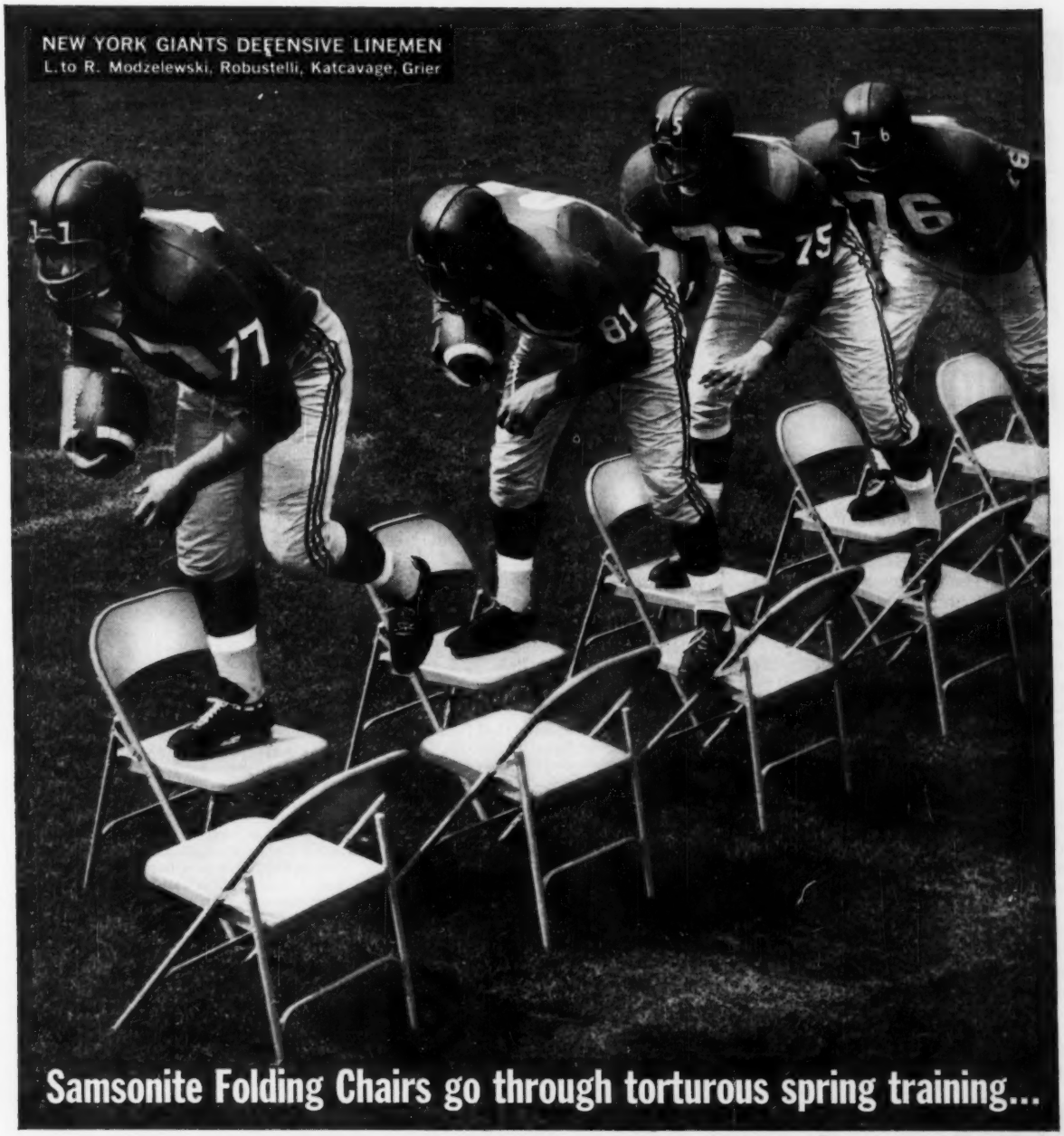
OUR COVER . . .

The cover article (pg. 38) is a review of South Junior High School in West Chester, Pa., a school designed specifically for a team teaching program.

for June...

Many educators are not familiar with the many ways in which acceleration may be accomplished and therefore are reluctant to recommend it as a means of educating the gifted. The JOURNAL brings you a systematic presentation of the subject of acceleration, stressing the different methods that may be used, and when it is best to incorporate principles of acceleration into a district's program.

The Editor



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Surveying the School Scene

PROPOSE STATE SCHOOL AID ON NEW FORMULA

State Commissioner of Education James E. Allen, Jr., has proposed that the basic formula by which the state distributes aid to local school systems be modernized. He maintains that the present formula does not reflect fairly some of the financial problems experienced by urban school systems, particularly New York City.

Dr. Allen has suggested that the revised formula take into consideration higher city school costs attributable to population density and the problem of educating larger numbers of pupils from "culturally handicapped" homes, such as Negro and Puerto Rican homes. Compensating New York City for its population density and high percentage of "culturally handicapped" children, would probably increase substantially the education aid that now goes to the city.

TEACHING 'MACHINES' TO BE IN SCHOOLS OF FUTURE

Two thirds of the work the average teacher covers in her classroom may be done by teaching "machines" or nonprofessional assistants in the school of the future, says Dr. J. Lloyd Trump, associate secretary of the National Association of Secondary School Principals.

Dr. Trump, speaking at the close of New York University's three-day annual Junior High School Conference, declared: "A teacher must have more time, other than after the dinner hour, to concentrate on the highly professional aspects of his job."

He estimated that 30 hours a week is the average time spent in classroom work by secondary teachers.

This could be reduced to 15 hours a week with the help of machines and assistants, he said. "In some areas these machines are just as effective as teachers."

Teaching devices he listed were recording machines, films, and television. The "machines" include mechanism which flash questions on a screen. The student then punches what he considers the correct multiple-choice answer. The machine keeps a record of how many right and wrong answers the student has checked, and produces his final rating.

Dr. A. J. Foy Cross, professor of education at New York University, another speaker, agreed that "machines can help in the learning process."

DIGEST ON CHILDREN AND YOUTH NOW AVAILABLE

The people of the United States are calling for quality in education, a return to traditional values, focus on prevention of juvenile delinquency, curb on early marriages, and more and better welfare programs. What is more, they are willing to tax themselves in order to improve the quantity and quality of services needed for the children and youth of America.

These facts are reflected in "The States Report on Children and Youth," a digest which was distributed to 7000 participants as they arrived at the 1960 White House Conference on Children and Youth in Washington.

The digest is based on reports submitted by Governor-appointed White House Conference committees in all the states, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands, in preparation for this sixth decennial conference on children and youth. It represents a national inventory of the unmet needs of the country's young people.

In contrast with the 1950 White House Conference on Children and Youth, which emphasized the rights of children, the digest reflects a trend to stress the responsibilities of young people, with young people themselves asking that they be trained to assume responsibilities. Some 20 per cent of the participants to the Conference are between the ages of 16 and 21.

EUROPEANS WANT AMERICAN-TYPE SCHOOLS

"I found that they" . . . Europeans . . . "are looking for the things we already have in our school system, and we are looking for what they already have in theirs," said Dr. Arthur S. Adams, president of American Council on Education, at a winter quarter commencement address at the University of Minnesota in Minneapolis.

"They are looking for further public participation in the administration and management of schools and want to lessen the rigidity of their system to give greater opportunity to more students," he said. "We would like to have the quality and discipline of their secondary system."

Dr. Adams was one of four Americans invited to interpret higher education in America at the Salzburg seminar in Austria last summer.

EDUCATION OF ADULTS HIGHER

The level of schooling among adults is higher than ever, according to a report of the U. S. Census Bureau. One half of the adult population now has 11 years of schooling, compared with 9.3 years in 1950. About 43 per cent of the adults have completed high school, compared with 21 per cent in 1940. Illiteracy has fallen to 2.2 per cent — nearly all Americans 14 years or older can read and write.

JURY RECOMMENDS POLICE AID IN HALTING DELINQUENCY

After a 28-month investigation of public school conditions, a Kings County, N. Y., grand jury, strongly recommended continued "close co-operation between school principals and the police" to stamp out delinquency.

This was the first of 13 recommendations in the jury's formal presentment handed up to Kings County Judge Samuel S. Leibowitz.

Other recommendations were that work camps or other custodial institutions be established to care for delinquent youngsters who require 24-hour-a-day care; that the superintendent of schools, John J. Theobald, be given greater power to suspend unruly pupils, and that the compulsory education law be amended to make it possible for troublesome 15-year-olds to get working papers for supervised employment.

COLLEGES RECEIVE INCREASED AID

The 2000 colleges and universities in the United States are receiving increased financial support, are spending more for educational activities, and are extending their holdings, according to a recent re-

(Concluded on page 56)

Just 75 years ago, heating was about as unpredictable as the weather, as temperatures alternated between shivery low and smother-high. Then a Wisconsin schoolteacher named Johnson decided to do something about classroom comfort and thereby launched a new industry!

The Story of the Thermostat

Actually this is the story of a symbol . . . the symbol of an industry that has brought comfort, safety, better health, and efficient working conditions to people all over the world.

. . . Every morning of the school year, millions of students sit down to study and learn in comfortably heated and ventilated or even air-conditioned classrooms. To help provide this ideal environment, the great majority of schools and colleges everywhere depend on precision pneumatic control systems.

. . . In a specially equipped manufacturing plant, delicate missile parts and components, with micro-inch tolerances, must be made under temperature and humidity conditions that never vary. At every step in their manufacture, modern pneumatic controls assure error-free regulation of the thermal environment.

. . . In a hospital, surgeons perform a lifesaving operation. Accurate pneumatic controls maintain the temperature and humidity at preselected levels to conserve the patient's strength during surgery.

. . . Far at sea, one of the nation's deadly new submarines cruises undetected, an elusive, power-laden sentry of the "Silent Service." Her crew lives and works in comfort and safety — in a climate precisely regulated by a pneumatic control system.

. . . Across the continent, pneumatic controls assure safe air conditions in the highly critical processing areas of an atomic energy facility. Pneumatic controllers of extreme sensitivity operate constantly to assure safe disposal of waste air and prevent the escape of contamination.

These are but a few examples of the ways in which modern pneumatic controls play a vital part in regulating the environment in which we live and work — helping to create made-to-order indoor climate for every purpose, controlling temperatures and humidities to a degree undreamed of when Professor Warren S. Johnson invented the first automatic temperature control system back in the 1880's.

Inventor at Work

Though he was probably unaware of the fact at the time, Professor Johnson became the founder of the automatic temperature control industry when he devised a practical way to eliminate the problem of classroom temperatures that seemed to zigzag forever between shiver and swelter.

His first attempt at control — the "annunciator" system — merely called the janitor's attention to overheating, or lack of heat, by ringing a bell in the furnace room. The janitor would then open or close the classroom dampers, as required.

But this land-based version of a ship's telegraph soon gave way to an all-electric method, utilizing a thermostat in each room that would open and close the dampers automatically. And so, the first system of automatic heat regulation was born.

The Electro-Pneumatic System

Intrigued with the possibilities of his long-awaited discoveries, Professor Johnson in 1883 left his post at Whitewater, Wisconsin, State College and came to Milwaukee to devote full time to refining and marketing the Johnson System.

His second major achievement, an electro-pneumatic control system, occurred almost at once. By successfully uniting the forces of *electricity*, for thermostat operation, and *compressed air*, for valve and damper operation, he developed a far more dependable and fully automatic control system. Finally he was ready to go out and revolutionize the comfort standards of the world. In 1885, he incorporated the business which today bears his name.

With branches established in Chicago, St. Louis, and New York, the Johnson thermostat on the wall soon became a familiar sight in the leading buildings of the day. Schools, prominent residences, and small business buildings were first to enjoy the comforts and economies of automatic control. They were followed closely by colleges, hospitals, public buildings, offices, stores, and industrial plants.

From Mikado to Czar

Acceptance grew, markets widened. The fame of automatic controls traveled fast and far. Before 1890, the city of Berlin, Prussia, had written a report about the efficiency of its Johnson System. Later, the palace of the Mikado in Japan was equipped with Johnson Control. The King of Spain and other European royalty became Johnson customers. A special installation was made in the Kremlin in Moscow!

Single Responsibility

Professor Johnson had the foresight to realize that the key to his success depended upon the *proper application* of his controls. Accordingly, he determined, from the outset, that his company should *never sell devices,* but should sell a *principle of control.* This meant that each system would have to be planned, manufactured, installed, and serviced *by Johnson* to meet the exact needs of the individual building.

Over the years, this policy of complete responsibility by a single specialized organization has insured owner satisfaction and saved untold millions of dollars for Johnson customers.

Carrying out this policy has also resulted in the closest possible working relationship between the Johnson organization and the nation's consulting engineers and architects, in a joint effort to provide ever better control of thermal conditions.

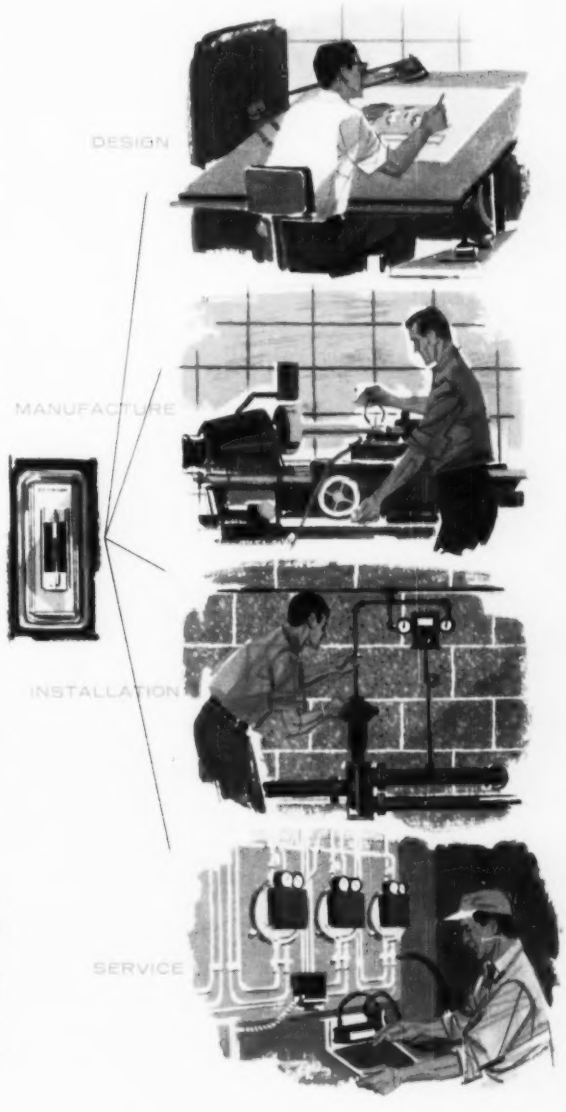
Many Johnson "Firsts"

The history of the thermostat and the Johnson Service Company coincides with the period when other pioneers were busy introducing innovations in heating, cooling, and ventilating methods and in developing full-scale air conditioning. Working closely with the research staffs of these manufacturers, Johnson engineers were able to supply the most effective controls for every new development in basic equipment. This cooperation has continued and flourished to the present.

Over the years, the Johnson Service Company has been the source of a never-ending flow of new ideas, which have included virtually all of the key developments in the field of automatic temperature control!

By far the most important was the all-pneumatic control system, perfected in the 1890's and still the standard everywhere. Others include the all-metal thermostat, the famous *Dual* or day-night thermostat, the heating-cooling thermostat, summer-winter thermostats, the airstream thermostat, master-submaster thermostats, supersensitive gradual-acting thermostats, and powerful piston damper operators.

Another famous development was the Humidostat or humidity regulator. And, of course, the Comfostat, an exclusive Johnson instrument that controls room temperatures in relation to humidity conditions. The popular pneumatic control center, for centralized supervision and control of modern air-conditioning systems, also was first perfected by Johnson.



Uninterrupted Progress

As the concept of controlled environment gathered momentum, so did Johnson. Important "firsts" became routine jobs, as the industry looked to Johnson for the answers to new control problems. From the simple comfort needs of the buildings of the 80's and 90's, to the history-making demands of the first scientifically air-conditioned building, down to the most complex requirements of today's commercial and industrial buildings, Johnson has been the leader in the pneumatic temperature control field.

Today, no matter where you go, you'll find the important buildings are equipped with Johnson Control. From the fabulous Fontainebleau Hotel to the mammoth Merchandise Mart to the famous UN Secretariat Building . . . in hospitals, in sprawling defense plants, in research laboratories, in vital military installations, in shopping centers, in buildings of *every* size and type and in ships at sea . . . there are temperature and air-conditioning control systems by Johnson.

Johnson's work in the school field is especially noteworthy. Since the invention of the first schoolhouse control system over 75 years ago, Johnson has helped plan and has installed control systems in more school buildings than the rest of the industry combined!

Johnson Today... and Tomorrow

To make certain that each installation performs up to expectations, Johnson backs its engineers with the most complete line of pneumatic temperature, humidity, and pressure control equipment in the industry.

To serve you most efficiently both before and *after* a sale, Johnson maintains the largest and most experienced field organization in the industry, with 107 completely staffed branch offices in the United States and Canada, plus full-time, factory-trained installation and service mechanics in over 200 other cities.

This is by no means the end of the story of the thermostat. For against this unmatched background of innovation, experience, and service, Johnson's never-ending search for new and better controls will inevitably lead to dramatic new ideas in the years ahead. As the day of completely air-conditioned cities approaches and as new and unprecedented demands for precision controls evolve, the forward-thinking Johnson organization will always be ready with the right answers.

The Johnson research and development staff and facilities have been expanded three times in the past four years. And final plans for the next major expansion are already underway! In the future then, as in the past, you can continue to look to Johnson for the world's finest controls!

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May, 1960

modern methods in RECRUITMENT OF TEACHERS

ARTHUR S. GREEN
Chicago, Ill., Schools

how various districts recruit teachers . . .
here is a **survey of teacher recruitment programs**
in districts of varying size and geographic location,
revealing the **trends in modern recruiting.**

What are the trends in teacher recruitment programs?

In our recent years of the "population explosion," the great need for hiring enough teachers to "keep up" with rising student enrollment has caused even the more favored, wealthier school communities to develop a program of attracting teachers.

From a national survey of practices in recruiting teachers several programs were selected to illustrate the trends in techniques utilized, personnel employed, costs, etc.

Lansing Utilizes Professional Help

Lansing, Mich., which serves about 25,000 students, is anxious to get the best possible staff available. In so doing, the school staff co-operates heavily with training institutions in hiring 150 to 160 new members each year. Lansing has the double advantage of being the state capital and of being adjacent to Michigan State University. The recruitment program involves sending lists of openings along with other pertinent data to selected teachers' colleges that have provided quality teachers in previous years. If a college feels that students are possible candidates, arrangements are made for interviews with one or more members of the Lansing school supervisory staff. Adequate representation of the schools is assured through the plan.

Above, Future Teachers Clubs study various aspects of teaching. Left, a co-ordinator of teacher recruitment addresses college students.

— New York Schools

To give adequate representation, the schools use as many different staff members as possible. The secondary principals interview candidates before they are hired. The elementary principals act as members of the recruiting team.

While the Lansing schools are enthusiastic about using principals, they are going to experiment with taking young, successful elementary teachers to talk to elementary teacher candidates. They feel this idea has real value. Lansing also has an F.T.A. chapter in one of the large high schools.

These various sources of professional help have been successful. What is more, Stephen A. Partington, assistant superintendent, feels that "Some of the best help I have had in the field has come from the American Association of Examiners and Administrators of Educational Personnel. This organization has been aggressive in its efforts to study the multiple problems in personnel administration, with particular interest on recruitment of staff."

New York Has Teacher Recruitment Committee

New York City has problems that are little different from any other large city. They lose hundreds of potential teachers each year to neighboring suburbs that pay slightly higher initial salaries. Specifically, increases in student population, decreases in class size, cessations of service, and leaves of absence are all factors in existing vacancies, too. For the next five years, the annual need for additional teachers will be 900 elementary, 1200 secondary, and 100 special education. Further, the law requires that teacher candidates must pass tests given by the board of examiners.

The teacher-recruitment committee, consisting of the associate superintendents in charge of each division of the school system, the superintendent of personnel, and a member of the board of examiners has spearheaded action to help alleviate the shortage. This includes: higher salaries, better working conditions, and co-operation with the teacher groups, civic organizations, and colleges in the city. They also put out a pamphlet: "A Career for You in New York City's Public Schools" which answers pertinent questions prospective teachers raise.

Their long-range program has increased immensely in the past year. There are F.T.A. Clubs in more than 100 of their 128 junior high schools. Many of the senior high schools have established Teacher Apprentice Clubs in which students get credit for spending part of an afternoon each week helping teachers in nearby elementary schools.

As for cost, a minimal amount of money has been spent on the recruitment program to date. Whatever incidental expenditures have been made have come from the superintendent's budget.

The program has been successful. "This fall, for the first time in many a year," says Eugene T. Maleska, coordinator of the committee, "we opened with only a handful of vacancies." For the committee, the publicity about the need for teachers has proved to be one of the effective means of recruitment. Failures in the tests and the somewhat cumbersome machinery in processing the examinations constitute a recruitment problem. But the board of examiners does serve an excellent function in screening out the undesirable candidates and helping to lift the standards for the entire school system.

Jackson Begins at Home

Jackson, Mich., public schools, which serve about 12,000 students, have no serious grade or subject-matter teacher shortages. The difficulty is to obtain certain special teachers, such as teachers of braille and sight-saving, classes of hard-of-hearing, and retarded children. Occasionally, too, there are difficulties in staffing the junior college, because of the problems of estimating enrollments and the variety of programs, some terminal and some in preparation for continued college work.

Operating usually within the state, Jackson spends about $2,000 a year on recruitment activities. Representatives — frequently the director of instruction or the personnel officer, or occasionally one of the principals — are sent to the placement offices of teacher-training institutions within the state. Toward spring, the superintendent occasionally covers the larger institutions in the Midwestern area. Of late years, a representative of the schools has also made a number of forays into the Southern states, when there has been a larger than usual turnover.

Of course, a fairly large number of local interviews with candidates are

held, particularly during the summer. The Jackson school district has an agreement with Michigan State University for giving students of education the opportunity to do practice teaching in the schools. About 110 students are thus employed annually. This has enabled the schools to secure some exceptionally fine young people.

Pasadena Has Variety of Program

Pasadena, Calif., serves almost 34,000 pupils from kindergarten through junior college, and continues to have needs for teachers in all fields and at all levels. All candidates must have full certification appropriate to California standards; in addition, they must be interviewed by three of the saff members of the city schools and must receive favorable recommendations before employment.

Pasadena's recruitment activities are varied. Besides visits to the campuses of the major teacher-training centers in California, the staff holds committee interviews four or five times a year by appointment, and accepts direct office applications throughout the year. Other interesting techniques are used: for one, the schools co-operate with such professional groups as Phi Delta Kappa and Delta Kappa Gamma in their teacher-recruitment conferences and programs. For another, "career days" and "youth days" are held in the city schools, providing the students with opportunities to observe occupational opportunities in business and in the schools. These, plus vocational guidance committees of certain service clubs, all offer opportunities to help promising young people see the possibilities of teaching as a worthy profession.

In terms of long-range recruitment, the Pasadena schools operate F.T.A. Clubs in the senior high schools. Also, they have an elective education course in the junior college, which offers good orientation to potential teachers.

About one third of the new teachers employed are found during recruitment visitations to campuses in California, another third comes from the committee interviews, and the rest from direct office applications.

Salem Meets Expansion Problems

The needs of the Salem, Ore., public schools are not unique; they have been increasing steadily over the past 15 years. During the past year, however, the annexation of several suburban districts has swelled the enrollment by 1300 additional students to 15,500 students.

The assistant superintendents for elementary and secondary schools share the responsibility for the recruitment program; their work is related to the first six grades and to the junior and senior high schools, grades 7–12, respectively.

trends in recruiting teachers

In teacher recruitment programs among various school districts surveyed for this article, what are trends in techniques and activities? Who was in charge of the programs?

The following summary outlines the practices in districts above and below 35,000 student enrollment:

1. Not counting school systems with adequate supplies of all the teachers they need, the teacher recruitment problems facing systems larger than 35,000 students are more highly magnified and quite different than systems of smaller dimensions. In terms of numbers, the shortages are proportionately higher in the latter. While special teachers, like those in the field of exceptional education, tend to gravitate more to systems serving metropolitan areas, the shortages are more in the classroom. Both are seeking the best quality teacher, but the process is much more complicated in the latter, essentially because of upgraded state certification requirements, and, in some cases, higher local standards. Further, many have had to currently put long-range plans into operation to recruit more additional secondary school teachers to accommodate the "budge" in the birth rate of the late forties.

Each system has a number of highly imaginative techniques to accomplish their aims. Personal — not formal — contact with prospective candidates. Attractive literature that considers the teacher both as a professional worker and as a person. Policies like selective or competitive examinations or oral interviews for the systematic approach to selecting candidates with a sense of fairness and objectivity. Using mass media and organizations within the community to convey its needs. Sponsorship of F.T.A. Clubs within the system to encourage the most promising students into teaching and give them realistic experience. These describe most of them.

Usually, at least one professional staff member is occupied with recruitment activities on a full-time basis. At least one office and at least one clerical employee is necessary to handle the paperwork. But, the budget is usually remarkably low.

2. The teacher-recruitment programs in school systems serving up to 35,000 students, have gradually changed from simply hiring enough classroom teachers to definite plans for locating teachers of the highest quality, as well as high school teachers of special subjects, e.g., science and mathematics. While teacher turnovers and dropouts are not significantly greater among the cities than in the days of the not too distant past, the need for teachers is greater because: (1) enrollments are increasing due to consolidations of school systems, (2) the high schools have increased their holding power, and (3) the school population has grown vastly. What's more, the bewildering variety of new offerings in the way of services performed by special teachers in the expanding field of exceptional education has added another twist,

Most school systems have teacher-recruitment programs that are characterized by traditional activities, such as interviewing, informative literature about both schools and the community, and contacting university and teacher placement centers. However, each local situation is different, each gives more emphasis to some activity, less to others. It is how they vary traditional techniques in creative and interesting ways that are precisely related to their special problems that accounts for their success. Similarly, each has definite reasoning for doing it — all of which is logically sound.

The superintendent himself often shoulders the responsibility for teacher recruitment in the smaller school systems. In the larger systems, the responsibility is usually delegated to assistant superintendents. And while the over-all cost of the programs is so low that it is seldom computed, success is something tha can definitely be valued and measured. Virtually all of the activities within the scope of the program are successful, and it can be accurately figured just how many teachers most of them succeed in recruiting.

"In larger districts at least one professional staff member is occupied with recruitment activities on a full-time basis."

They do visit local teacher-training institutions in the midwinter and early spring and are in constant communication with them. As the state capital, Salem attracts prospective teachers. Salem is also fortunate enough to serve three nearby colleges by offering practice-teaching opportunities to education students. In this way Salem maintains rather close contact with the students and employs some of the best.

The sound reasoning behind practices like these has been the real attractiveness of the Willamette Valley and Salem as a place to live, to work, and to bring up children. This has led the school administration to recruit or locate teachers in the easiest way. Dr. George Martin, assistant superintendent for secondary schools, thus describes the program: "We believe that in general our recruitment program has been successful."

Bethlehem Has Three-Phase Program

Bethlehem, Pennsylvania, which enrolls about 13,000 pupils, has little difficulty in filling vacancies. The schools, however, do experience difficulty in finding teachers for highly specialized areas such as special education, high school science, high school mathematics, and Latin. For the past several years the schools have been employing on the average of 55 to 75 new teachers annually.

The teacher recruitment program has three phases: First, there is a very active F.T.A. Club in the senior high school. Then, a flyer is distributed to all teacher-training institutions in the state. This includes essential information about: teaching conditions, salary schedule, employee benefits, professional opportunities, cultural atmosphere, social and civic activities, and local teachers' associations. Finally, visits are made by members of the administrative staff to college campuses for interviewing prospective teachers.

Cheyenne Encourages Applicants Nationwide

The Cheyenne. Wyo., public schools, which serve about 12,000 students, must employ annually approximately 70 additional staff members and replacements. The employment problem seems to be changing from one of finding enough teachers to finding teachers of the quality desired.

It is the policy of the district to encourage applications from various parts of the country, because the school board and the administrative staff feel it is to the benefit of the community to have teachers with varied backgrounds and training. Therefore, recruitment follows two patterns: One is correspondence — checking inquiries from all over the country. The other is visiting with placement services in Wyoming, Colorado, and Nebraska, and on demand in other states. In addition, the schools issue a brochure that gives information to people interested in locating in the Cheyenne area.

No actual cost analysis has been made of the recruitment program, because the cost, excluding the salary of the recruiting personnel, is nominal. Up until this time, the bulk of the recruitment has been made by the superintendent himself, with some assistance from the assistant superintendent. But these officials are reaching the point where a change in operation will be needed. The possibility of establishing a personnel department has been given consideration.

As to the success of the program, according to Supt. S. R. Clark, "We think our recruitment program has been reasonably successful during recent years. There has been some uprating of the quality of our staff."

Hillsborough County Schools Have Principals Assist

Hillsborough county public schools, Florida, in the Tampa area, serves 74,000 students. During the past year they had to hire about 500 new teachers; more than 200 to accommodate growth and expansion and 300 replacements for teachers who terminated their service at the close of the school year. The greatest number of teachers needed has been on the elementary — especially the lower — level. What's more, enrollment reaches its peak usually in February.

Hillsborough has a number of interesting activities. On their home grounds, they start recruitment in their own schools by sponsoring F.T.A. Clubs; encouraging the best students to consider teaching as a profession. The climate, desirable living conditions, excellent relations with nearby colleges and universities, plus local civic and social organizations all contribute to making teaching attractive.

The system also has a policy of permitting principals to initiate all requests for appointments. They justify this on the basis that the principal is the professional leader of the school center. Thus the teacher applicant has a greater feeling of security when he realizes that he is assigned to a school center upon the principal's request. Therefore, principals and appplicants must have interviews at school centers before selections are made, so that both parties know the advantages and disadvantages connected with the assignment before the superintendent makes the appointment recommendation.

To accomplish this on a practical basis, the personnel director first secures applications, checks the credentials, and interviews each applicant to determine if minimum requirements have been met. Then data of acceptable applicants is made available to all principals. The personnel director has a staff of three secretaries to care for all of the clerical work.

The fact that no expenditures have been made to promote teacher recruitment speaks well of the success of the program. Further, there has been a constant upgrading in the qualifications of the personnel. The number of teachers without college degrees has decreased from 131 in 1948 to 4. Those holding master's degrees or higher has increased from 178 in 1948 to 563. Teacher morale is high and there are practically no resignations because of dissatisfaction. And while the system did not actively recruit teachers on college campuses out of the state, they have ample variations in background of training and experience — including foreign countries. ■

The Teacher Shortage Persists

RAY C. MAUL
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The 1960 teacher supply and demand report . . . Dr. Maul's preview of the most reliable indicator of the 1960 opening-of-school teacher situation, the NEA Research Division's "Annual National Supply and Demand Report" which highlights the September picture as a guide toward what you can expect in relation to your district's needs.

Superintendents, in their role as employers of teachers, already know that relief from the teacher shortage is not in sight. Candidates with acceptable qualifications are no more numerous now than they were a year ago. True, the Class of 1960 — bachelor's degree graduates — will be a little larger than was the Class of 1959. And the percent of these oncoming graduates who will be prepared for teaching will be about the same as the per cent of the recent classes. But this modest increase will no more than offset the increase in enrollment which will surely occur next September. A nationwide picture of the situation in the spring of 1960 is provided by the Thirteenth Annual National Teacher Supply and Demand Report just released by the research division of the National Education Association.[1]

Here are some high lights of the current report:

■ The class of 1960 will produce a total of 129,295 newly eligible teachers. This will be an increase of 8.3 per cent over the 119,421 produced a year ago.

■ The new prospective high school teachers will total 80,465, an increase of 12.4 per cent, while the new prospective elementary school teachers will total 48,830, an increase of only 2.1 per cent.

■ Among the high school fields, the promised gain in new mathematics teachers is greatest, up 31.9 per cent over a year ago.

■ The promised increase in new science teachers is 26.4 per cent and in foreign languages, 21 per cent.

■ Other above-average increases will be in English, 15.0 per cent, and in commerce, 14.4 per cent.

■ Below-average increases are indicated in social sciences, 9.7 per cent; music, 8.6 per cent; men's physical education, 7.8 per cent; home economics, 5.0 per cent; and in industrial arts, 4 per cent.

Table 1 contains the specific figures for both the 1959 and the 1960 classes, with the latter shown separately by sex.[2]

This annual report is designed to serve these two major purposes: (1) To provide employing officers with an early view of the oncoming new supply of prospective candidates; (2) to provide basic information needed by counselors in both high school and college.

[1]The research division brings together in one composite report the results of carefully coordinated research conducted by each of the 50 state departments of education. Through the responsible official in each state capital a copy of the national report goes to the campus of each college and university in which teachers are prepared. Usually this state official is the Director of Teacher Education and Certification or the Director of Research. The report is used in counseling with college students so that these students may have the most up-to-date information concerning the number and the specific kind of teaching opportunities most likely to be open to them. High school counselors and guidance directors should order their copies directly from the NEA publication-sales division, 1201 — 16th St., Washington 6, D. C., 75 cents per copy.

[2]It must be noted that these figures are compiled in November and December and thus the exact numbers in the class to graduate the next spring, as shown in columns 2, 3, and 4, cannot be exact. For that reason a final report on the preceding year is always shown in column 5. Improved reporting procedures have reduced the error to less than 5 per cent.

Distribution of High School Candidates

Superintendents are finding some encouragement in their search for new high school teachers. First, the class of 1960 promises to produce 12.4 per cent more new prospective candidates than a year ago. Second, and probably more significant, the new supply is increasing most rapidly in the fields of most acute shortage. This is the third year in which a favorable increase in these fields is reported. It clearly reflects the efforts of teachers and counselors to focus attention upon the critical need for high school teachers of mathematics and the sciences.

But a percentage increase must be viewed in terms of the base on which it is computed. In 1950, the year in which the colleges produced the greatest number of bachelor's degree graduates, the total number of those graduates prepared for high school teaching was in excess of the total need. This was not true, however, in all teaching fields. There was a gross oversupply in men's physical education and a modest oversupply in the social sciences. Some fields, including the sciences, were about in balance, but some were in short supply, notably mathematics, home economics, and women's physical education.

The violent fluctuations of the next five years changed these interfield relationships. While the total number of bachelor's degrees was falling 33.7 per cent the total number prepared

TABLE 1. Total Number of College and University Students Completing Certificate Requirements in 1960, Compared With the Number Who Met Such Requirements in 1959.

	Type of preparation	1960 Men	1960 Women	1960 Total	1959 total	1959 to 1960 Net change	1959 to 1960 Percent change
	1	2	3	4	5	6	7
	Elementary-school teaching:						
1	120 semester hours	6,112	42,718	48,830	47,836	+ 994	+ 2.1%
2	90 semester hours	39	210	249	270	- 21	- 7.8
3	60 semester hours	332	2,897	3,229	3,243	- 14	- 0.4
4	30 semester hours	23	236	259	398	- 139	-34.9
5	Elementary-school total.	6,506	46,061	52,567	51,747	+ 820	+ 1.6%
	High-school teaching:						
6	Agriculture	1,485	17	1,502	1,513	- 11	- 0.7%
7	Art	948	1,760	2,708	2,406	+ 302	+12.6
8	Commerce	3,022	4,394	7,416	6,481	+ 935	+14.4
9	English	2,768	6,656	9,424	8,195	+1,229	+15.0
10	Foreign languages	729	1,471	2,200	1,817	+ 383	+21.1
11	Home economics	1	4,957	4,958	4,720	+ 238	+ 5.0
12	Industrial arts	3,893	92	3,985	3,830	+ 155	+ 4.0
13	Journalism	28	48	76	74	+ 2	+ 2.7
14	Library science	43	325	368	453	- 85	-18.8
15	Mathematics	3,778	1,872	5,650	4,283	+1,367	+31.9
16	Music	2,536	2,931	5,467	5,036	+ 431	+ 8.6
17	Physical education (Men)	7,753	...	7,753	7,189	+ 564	+ 7.8
18	Physical education (Women)	...	3,186	3,186	2,805	+ 381	+13.6
19	Science	5,528	2,269	7,797	6,167	+1,630	+26.4
	19a General science	2,540	953	3,493	2,698	+ 795	+29.5
	19b Biology	1,850	952	2,802	2,382	+ 420	+17.6
	19c Chemistry	687	270	957	693	+ 264	+38.1
	19d Physics	451	94	545	394	+ 151	+38.3
20	Social sciences	8,986	4,585	13,571	12,366	+1,205	+ 9.7
21	Speech	723	1,201	1,924	1,819	+ 105	+ 5.8
22	Other	1,162	1,318	2,480	2,431	+ 49	+ 2.0
23	High-school total	43,383	37,082	80,465	71,585	+8,880	+12.4%
24	Grand total, exclusive of students with only 90, 60, or 30 hours of credit (lines 2, 3, and 4)	49,495	79,800	129,295	119,421	+9,874	+ 8.3

(In some states all graduates prepared to teach the sciences are reported under "General Science" as shown on line 19a. Many of these graudates have the equivalent of a full major in Biology or Chemistry or Physics and are thus well prepared to teach one of these subjects. This should be recognized in interpreting the figures shown on lines 19b, 19c and 19d.)

to teach in high school fell 42.8 per cent, *but the number prepared to teach mathematics fell 53.3 per cent and the number prepared to teach the sciences fell 58.7 per cent.* Thus the base for computing the subsequent per cent of increase, not the per cent of increase itself, became the significant factor. And thus the recent encouraging *percents of increase* in college graduates prepared to teach mathematics and the sciences should not be interpreted as evidence of relief of the critical shortage.

And even with this encouraging increase in the gross number of bachelor's degree graduates prepared to teach in these fields of greatest shortage, their employment for classroom service is still to be achieved, i.e., superintendents must be able to compete successfully for their services. It certainly is recognized that the decade just closed brought the greatest expansion of all time in the general demand for highly trained personnel in the scientific fields. Thus the greatest unmet need of the high schools is in certain fields, rather than gross numbers. It is meaningless to say that the teacher shortage will be relieved if and when the total number of eligible candidates approaches the total number who will be employed for these three reasons:

1. The supply must be distributed among the grade levels and teaching fields according to the need.
2. The need for a teacher is always at a *specific location,* therefore a qualified candidate must be available at that place; a vast number of competent persons are available for teaching positions only if they can select the place the position is to be filled.

Field of preparation	Percent of total: Teaching	Otherwise gainfully employed	Continuing formal study	Military service	Homemaking	Seeking employment	Other
1	2	3	4	5	6	7	8
High school (by fields)							
Agriculture	46.3%	21.2%	7.3%	9.0%	...%	2.5%	13.7%
Art	68.4	3.5	4.5	1.5	5.0	2.2	14.9
Commerce	58.7	18.0	3.5	1.8	3.8	2.6	11.6
English	71.3	4.6	6.1	1.6	4.7	1.6	10.1
Foreign language	65.6	4.7	13.1	1.6	3.1	1.1	10.8
Home economics	64.7	11.0	2.5	0.1	10.9	2.6	8.2
Industrial arts	69.0	8.8	3.7	5.2	0.1	3.1	10.1
Mathematics	73.9	6.8	5.5	3.4	2.0	1.1	7.3
Music	74.0	3.5	6.4	2.4	3.5	1.3	8.9
Physical education:							
Men	65.5	6.4	5.8	7.8	...	3.2	11.3
Women	78.9	3.0	3.6	0.1	4.9	1.4	8.1
Science	66.5	7.1	8.5	3.1	1.6	1.8	11.4
Social science	62.8	7.3	7.7	4.1	2.1	3.5	12.5
Speech	63.9	7.4	8.6	1.8	5.1	1.6	11.6
Other	55.5	14.5	6.4	2.6	2.8	1.8	16.4
High School TOTAL	66.4	8.1	6.0	3.2	3.2	2.3	10.8
Elementary TOTAL	82.3	1.3	1.3	0.5	4.4	1.3	8.9
GRAND TOTAL	72.5%	5.5%	4.2%	2.2%	3.6%	1.9%	10.1%

TABLE 2. Occupations of the New Supply of Teachers Produced in 1959.

- A total of 129,295, an increase of 8.3 per cent, newly eligible teachers will be produced in 1960.
- Prospective high school teachers will total 80,465, an increase of 12.4 per cent; elementary school teachers will total 48,830, an increase of 2.1 per cent.
- The promised gain in new mathematics teachers is up 31.9 per cent, that of new science teachers, 26.4 per cent, and of foreign language teachers, 21 per cent.
- The most imperative need is for a larger supply of adequately prepared elementary teachers.

— Mott Foundation, Flint Mich.

3. The need for teachers has far exceeded the number actually employed because (*a*) additions to the staff have barely kept pace with increasing enrollment, which means (*b*) that overcrowding has not been relieved where it exists and half-day sessions have not been eliminated, (*c*) services have not been provided to meet the needs of the handicapped and the gifted or to give effective counseling, and (*d*) many wholly unprepared teachers have not been replaced as the educational welfare of the children demands.

The present maldistribution among the high school teaching fields is shown in the following per cents of the new oncoming group in each field when compared with the per cent of all high school teachers engaged fully or chiefly in each field:

Field	*Per cent of new prospective teachers in 1960*	*Per cent of all teachers in service*
English	11.7	15.5
Mathematics	7.0	12.9
Sciences	9.7	12.6
History and other social sciences	16.9	11.7
Business education	9.2	11.7
Industrial and vocational education	4.9	6.3
Foreign languages	2.7	5.2
Home economics	6.2	4.8
Health and physical education:		
Men	9.6	2.1
Women	4.0	2.3
Agriculture	1.9	2.8
Music	6.8	2.7
Art	3.4	1.2
Other	6.0	8.2
TOTAL	100.0	100.0

Elementary Shortage Most Critical

The most unfortunate aspect of the general teacher supply-demand situation is the unbalanced division of the whole group of new candidates between the elementary and high school grade levels. The most imperative need has been, and continues to be a much larger supply of adequately prepared teachers for the elementary grades. It far overshadows the maldistribution of potential high school teachers among the high school fields, as described in the foregoing paragraphs. Moreover, the recent trend is away from, rather than toward a solution of this major problem.

The difficulty has an historic setting. As long as forty years ago (in 1920) the NEA Delegate Assembly called for a minimum standard of the bachelor's degree for high school teachers. But 20 years later, as we entered World War II, only a handful of states had made a pretense of establishing this standard of preparation for elementary school teachers. And after another 20 years we now (in 1960) see some 40 of the 50 states struggling, with varying measures of success, to staff their elementary school classrooms with persons of this minimum educational background. In all, the corps of 835,000 full-time teachers includes some 200,000 who are not college graduates, with many of them far below this standard.

This review of the record during the past ten years — the era of greatest progress in the struggle to upgrade the elementary school teacher — points up the vast dimensions of the unfinished task:

1. In 1950, when the colleges granted some 484,000 bachelors degrees, just 26.6 per cent of the total graduates were prepared to become teachers, *but 87,000, or 20 per cent were pointed toward the high school classroom, with only 28,500, or 6.6 per cent prepared for elementary school service.*

2. The next five years marked our greatest progress toward a better division of the whole group. By 1955 the total number of graduates had fallen 33.7 per cent, the number prepared for high school teaching had fallen 42.8 per cent, but *the number of college graduates prepared for elementary school teaching had climbed 31.9 per cent!* Even so, the gross total was only 37,700, compared with 49,700 newly qualified high school candidates. The point to be noted is that 1955 marked the end of this five-year trend toward a more favorable division of the newly produced supply between elementary and high school service.

3. Beginning in 1956 an increasing proportion of the total new supply was pointed toward the high school, and this gap continues to widen, despite the fact that the total number of positions continues to be in the ratio of eight elementary to five high school.

Here are the per cents for each of the ten years for which the data are available:

Year	*Per cent of bachelor's degree graduates prepared for teaching in*		
	High school	*Elementary school*	*Total*
1950	20.0	6.6	26.6
1951	19.0	8.8	27.8
1952	18.5	11.4	29.9
1953	17.7	12.3	30.0
1954	16.7	12.6	29.3
1955	17.3	13.1	30.4
1956	18.3	13.1	31.4
1957	19.1	13.0	32.1
1958	18.9	12.4	31.3
1959	18.5*	12.4*	30.9*

It is becoming increasingly clear that the heart of the teacher supply-

*Estimate. Subject to final count of total number of bachelor's degree graduates.

(Concluded on page 47)

How Laurel Organized a Discipline Policy

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all about **a committee approach to discipline study . . .** if your board plans to evaluate its discipline policies, consider how this one district approached its analysis of what was needed to solve the problem

Early in 1959 the upper six grades of Laurel School District were ready to move into a new junior-senior high school. Laurel was a school system which had become a jointure in 1955–56 made up of the former township schools of Hickory, Scott, and Slippery Rock, all situated in Lawrence County, Pennsylvania. In the fall of 1957, the electorate of these townships voted to make their jointure a Union School District.

During this period of transition, overcrowding of classrooms and inadequate facilities were prevalent. Double sessions in the junior-senior high schools were instituted in the fall term of 1958 when the new high school building was not ready for occupancy and there were too many students for the four existing eight-room buildings of the district. Almost all Laurel students were transported to and from schools by school bus as the area was largely rural with small urban centers widely scattered.

Discipline problems became more apparent during this period when too many students were placed in too close proximity.

How to discipline in a school society when corporal punishment no longer fits the folkways of most homes and when student detention after school caused the student to miss his assigned school bus, became one of the pressing problems.

In February of 1959 the president of the Laurel school board appointed a three-man committee to work with three parents, selected one each from the three Laurel PTA's, and three members selected by the teachers organization of Laurel School District to study the problem of discipline in the district.

This committee met once a week for 16 weeks to study the problems of discipline of school children in Laurel School District and the problems of school children in general. After a detailed study of the Pennsylvania school code, magazine articles, interviews of personnel, and a home questionnaire, the committee reported to the Laurel school board the accompanying plan.

The Laurel school board adopted this plan in its entirety as board policy. The board further directed that the discipline committee report be published as a section of a public relations booklet and mailed to each family just prior to the start of the 1959–60 school term.

The adoption of this plan by the board of education and its publication has had far-reaching influence on the Laurel school and community. It is now the basis for in-school rules and regulations for pupil conduct. The spirit of the report has served to guide the efforts of the district PTA'S of which there are now four (one in each elementary center) and was instrumental in the starting of a PTSA (Parent, Teacher, Student Association) which was formed in the fall of 1959 in the high school.

recommendations for policies on discipline in Laurel

The committee studied discipline problems in the Laurel School and unanimously agreed on the conclusions submitted.

The committee began work by considering specific forms of discipline problems which were considered most troublesome by the teachers on the committee. As discussions progressed, it was found that most of these problems are already covered by the Pennsylvania school code, and that certain disciplinary actions can be authorized by a local board within the scope of that code. Before outlining recommendations on these specific problems, the committee listed general conclusions which they felt should be emphasized in the adoption of a discipline policy by the board and in the implementation of that policy by the school administration.

A. General Recommendations

1. Parents, teachers, and pupils should receive a printed statement of the policy adopted by the board.

2. Parent groups, such as the PTA's, should be asked to assist in parent education on the board policy.

3. Students should be encouraged to adopt a code of ethics to govern their conduct both in school and in their community life. This can be done through the student councils and the

high school PTSA unit, both of which should be formed as soon as possible.

4. Parents and students should be made aware of the students' obligations in attending school. In this respect, it should be emphasized that school is not only a right, but a privilege which can be taken away by board action. A suggested list of these obligations is as follows:

A student should:

a) Obey all rules and regulations adopted by the school administration.

b) Respect the authority of the teachers and bus drivers.

c) Display proper conduct to and from school, whether walking, driving, or on buses.

d) Be diligent in study, which includes: (1) completing all assigned work on time; (2) paying strict attention to the teacher at all times; (3) doing all schoolwork as well as he can within his ability and grade level; (4) co-operating with teachers and other students; (5) being regular and punctual in attendance; and (6) making full use of study halls to complete asigned work.

5. Classroom discipline is primarily the responsibility of the classroom teacher. Complete files should be kept of all breaches of discipline or negligence in study with a record of corrective action taken, so that recommendations for drastic action such as suspension or expulsion can be fully backed up by a case history.

6. It is recognized by authorities that most discipline problems are traceable to the home. The school administration should make the fullest use of counselors, home visitors, truant officers, etc., to establish contact with the homes and to try to help parents of students who are becoming habitual offenders.

B. Specific Recommendations on Discipline Problems

1. The School Code, concerning unexcused absences should be fully enforced as follows:

a) A printed form listing the penalties for unexcused absences should be given to the student the day he returns after an absence.

b) This form is to be signed by the parent and returned the following day, or second day, after the student's return.

2. No smoking or other use of tobacco by students should be permitted on school property, including buses and adjoining sidewalks and roads during school hours.

3. Any disrespect for teachers by students should be strongly censured by the school board and they should give the principal the authority to handle such cases as follows:

a) Classroom discipline should be emphasized as the responsibility of the classroom teacher.

b) Disobedience should be punished by detention, denial of privileges, or other milder forms of discipline in the case of first and second offenses. Habitual offenses provide cause for suspension.

c) Hostile or discourteous remarks, threats, and improper or abusive language will not be tolerated and shall be cause for more severe discipline, including suspension, at the principal's discretion.

d) General misbehavior in halls, study halls, disruption of class routine, etc., shall be handled as in the case of paragraph (*b*) above.

e) Physical attack upon a teacher or any school employee shall be cause for immediate suspension.

4. The School Code, concerning defacing school property should be strongly enforced.

5. Habitual tardiness should be discussed with parents and, in the case of students who drive, driving privileges be removed.

6. Driving privileges should be allowed only to students whose parents or guardians can prove a definite need, such as working to help support family, participating in athletics, etc. Permits should be issued by the principal, stating who is permitted to ride in the car. Car is to be parked in designated student parking area, and not used during school hours. Driving privileges should be removed for any misuse of privileges.

7. The school board should educate school-bus drivers to exercise their authority for discipline as outlined in "Rules and Regulations for Bus Drivers." School-bus discipline, in the interest of safety, should be further enforced as follows:

a) All students should be assigned to regular seats and be subject to punishment for not sitting in assigned seats.

b) Student monitors should be assigned to each bus to observe and report any misconduct, thus permitting the driver to give full attention to driving.

c) In cases of repeated or major offenses on school buses, parents should be contacted and, if necessary, transportation should be refused.

8. Cutting classes should be penalized by detention for the time missed. No class credit should be given until work is made up.

9. If the teachers and principal have made the fullest use of all available corrective measures and a student is still willfully breaking rules, or disrupting class routine by making no effort to perform within his ability to study and learn, then the school board should notify the parents that expulsion will be used. Student is to be placed on probation and if no improvement in conduct is made, then expulsion should be used.

Any set of rules is only as strong as the people who are authorized to enforce them. In this respect the principal should educate all teachers on their responsibilities for using discretion and good judgment at all times.

It should also be emphasized that teachers should expect good from students and encourage them to cultivate self-discipline. Parents also should be educated in an attitude of respect for the school system, which will carry over to the children and to their conduct. ■

sampling community opinion on discipline

In February, your school board set up a committee to make recommendations concerning a uniform standard procedure covering discipline problems not expressly taken care of by the state school code. The committee would like to have a sampling of community opinion on some questions. Your answers can aid us in determining the policy recommendations the committee will make to the board.

- **Do you feel that teachers should receive the same respect from your children as you demand from them, since the Pennsylvania State School Code gives the teacher the same authority over your children which you have. (.... yes .... no)**
- **High school students are often capable of mature judgment. Do you as parents feel that they should have some school organization through which they could voice their opinions on policy problems in addition to working through their parents. (.... yes .... no)**
- **Are you familiar with the difference between suspension and expulsion? (.... yes .... no)**
- **It is recognized that some form of punishment is necessary for flagrant violation of rules and regulations, such as disobedience, cutting classes, etc. Do you favor detention or "extra time" as a form of punishment for junior-senior high students for some offenses such as tardiness? (.... yes .... no)**
- **Should high school students be permitted to drive to school and park on the school property when there is not a need; such as, student needs to be home early to work, etc. (.... yes .... no)**
- **Do you think each pupil should receive a booklet covering rules and regulations? (.... yes**
- **Do you favor corporal punishment for junior-senior high school students? (.... yes .... no)**

Tips for Better Board Meetings

— Harold M. Lambert

how to have efficient meetings . . . a checklist of basic hints for better board meetings, an important key to effecting effective boards and better schools.

J. H. HULL

Superintendent, Torrance, Calif., Unified School District

1. The board of education welcomes citizens to board meetings.

2. There should be a public hearing time in the early part of each meeting when anyone in the audience may have the ear of the board. If it appears that the discussions are going to be long, the president should set a time limit on speakers and allow them only a certain number of times to speak.

3. Meetings are governed by "Roberts Rules of Order" and other accepted parliamentary procedure.

4. Board members may interrogate speakers and ask questions for the benefit of the entire board.

5. Personality discussions and demonstrations are not in order.

6. When appropriate, the board may take certain items out of order for the convenience of individuals who do not wish to sit through the entire meeting.

7. Interference in board deliberations by the audience is out of order unless the board chooses to bring members of the audience into the discussion. However, it is not good practice for a board to permit audience interference with its deliberations because no delegation of individuals is capable of representing the entire community.

8. The board makes its decisions in terms of the facts and welfare of children and taxpayers of the entire community.

9. The board does not run around to lesser bodies to do business with them. It lets them come to it at its regular board meetings.

10. The president of the board presides over all meetings under accepted rules of parliamentary procedure.

11. The board works as a committee of the whole.

12. No committees should be tolerated in any form, either standing or special.

13. Politics have no place in board meetings.

14. Decisions are based on fact, information, and what's best for children with due concern for the tax dollar.

15. Information is on the table — nothing is held back.

16. Staff reports must be complete, using all the data it is appropriate to obtain.

17. Special meetings are very rarely held. Few are justifiable.

18. The staff is kept in their place by changing seats, requiring each to carry his load.

19. Not all people who come to the board to be heard are answered. Judgment says be courteous and thank them but answer in your own proper time — if you answer. Some

require answers now or later; some just want to be heard.

20. Only the superintendent and board members should be seated at the board table.

21. The staff should be seated at staff tables. Keep them separate; keep their functions separate.

22. The staff should not be allowed to put things through the board on the superintendent's reputation with the board. Every item must stand on its own merit backed by research, fact, policy, and logic.

23. The board should be careful about complimenting and criticizing the staff. The board passes judgment only when it is called upon to make a decision.

24. Neither the superintendent nor board members should be the kind who have the answers before they hear the questions.

25. As secretary to the board, the superintendent sets up, prepares, and determines the agenda. Board members suggest items from time to time. Sometimes the superintendent puts them on now, sometimes later, sometimes not at all.

It does no good to attempt a decision on an item upon which the board is split. Until enough information and background are available to make a unanimous decision, the item should be an information item rather than an action item. This is the point that has cost many a board and community an otherwise good superintendent. To demand a decision before people are ready is like running ice water through stale coffee grounds.

26. Visitors who attend the board meetings are invited to sign the visitors' register and identify themselves. It discourages anonymity.

27. No advance agendas should be given to either board members or newspapers. Agendas sent out a few days in advance do not give board members sufficient time to become acquainted with issues on which they are requested to make a decision. Therefore, advance information on future agenda items is provided in information items or discussion items on current agendas. All action items are either routine or have had previous information about them in one or most agendas at previous meetings and the time has come when a meeting of the minds will result in a unanimous decision.

28. No surprise decisions are requested, and decisions are not made on nonagenda items brought up at the hearing period until the staff has had time to review and recommend. New policy is not passed until the second or sometimes third reading. ■

How Federal Aid will Simplify Administration

During the current rage over the advisability of federal aid to education there has been overlooked its potential for simplifying the problems of administering public schools. Assuming that the federal government shares the major burden of financing schools in the future, and also shares the concomitant responsibility for operating the schools, by the year A.D. 2000 a superintendent of schools could handle these common administrative problems in the simplified manner in the following manner:

Parent: I want my child's teacher changed.
Superintendent: I only work here; see your senator.
Citizen: My school taxes are too high.
Superintendent: See your congressman; finance bills originate in the lower house.
Teacher: Our arithmetic books are worn out; can we order new ones?
Superintendent: This is election year; no additional expenses this year.
Citizen: Kids are cutting across my lawn on the way home from school and have damaged my petunias.
Superintendent: Don't bother me. File your list of damages with the United States regional court of claims.
Parent New To The District: What school will my child attend?
Superintendent: The U. S. office of education does not distribute its building and pupil allocation until August.
Teacher: When can we start teaching that new unit which we developed for eighth grade history some time ago?
Superintendent: Let's see, we submitted our recommendations for that unit in 1922. They're working on it last I heard.
Janitor: I want a raise.
Superintendent: See your congressman; finance bills originate in the lower house.
High School Student: But why can't we have a pep rally?
Superintendent: This is an election year; White House directive dated January 4 forbids all rallies that might detract from nominating convention rallies.
Parent: How many days will we get for Christmas vacation this year?
Superintendent: Maybe I don't have to answer that question; did you vote in the last national election?
Parent: That teacher kept my child after school just for throwing a paper wad!
Superintendent: Detention for paper-wad throwing upheld by United States Supreme Court, *Althouse* vs. *Union School District, Ga.*, 11 T.381, 1976.
Principal: Why didn't I receive my annual supply of writing paper for the third grade?
Superintendent: Congressional budget committee increased military appropriation this year; education budget reduced.
Parent: You're not teaching phonetics like they used to?
Superintendent: USGPO Bulletin #98472-Y eliminated phonetics, especially when they occur in words.
Parent: How do I get the bus to stop in front of my house?
Superintendent: See senate subcommittee on intrastate communications and transportation.
Board Member: Who got our coal order last year?
Superintendent: I can't react to that question; my secretary-clerk, junior grade, misplaced my 1999 copy of manual of superintendent's stock answers to inquisitive board members.
Citizen: As chairman of the local campaign for foot corn research, may I have permission to solicit funds from pupils?
Superintendent This is an election year; White House directive of January 4 forbids any solicitation of funds from pupils enrolled in public schools (on school time) for other than party campaign chest.
Parent: My child can't eat that lousy food served in the cafeteria!
Superintendent: Why tell me? Write the secretary of agriculture.
Parent: The discipline in this school is too lax.
Superintendent: This is an election year; White House directive of January 4 forbids school officials from alienating any registered voters.
Parent: My little Everett is so smart for his age; why can't you make an exception for him to start first grade even if he won't be six until December?
Superintendent: Is he Republican or Democrat?

Robert E. Wilson
Associate Professor of Educational Administration, Temple University, Philadelphia

How to Improve the Local and State School Tax Structure

ERICK L. LINDMAN
Professor of Education, University of California
Los Angeles, Calif.

Before improvements in the school tax structure can be made, the community must want a better tax structure. If the people really want a better school tax program, many of the necessary changes can be easily achieved.

The school tax program has two aspects: (1) the *planning process*, by which the community decides how much it will spend for schools, and (2) the *billing process*, by which the community decides who shall pay how much toward the total school budget.

The Budgetary Process

Deficiencies in both these processes contribute to the depressed condition of educational finance found in many communities during this period of national prosperity. Cherishing the ideal of equal opportunity for all youth and professing confidence in the soundness of investment in education, the richest nation in the world has many poorly financed schools. A rich man who skimps on the education of his children in order to live in conspicuous luxury would be soundly condemned by most Americans. Yet, many communities are guilty of the offense they would condemn in an individual. This anomaly is explained, in part, by weaknesses in the school taxing procedure.

The planning process, the procedure by which the total amount to be expended for schools is determined, often fails to show to the voters the relationship between school expenditures and the quality of education. The American voter is a bargain hunter, and, tutored only in the rugged realities of the American market, he holds his own fairly well against the wiles of the American salesman. To do this, he judges the relative worth of similar products selling at different prices, and he selects the one which he considers to be the best buy. If he detects no difference in the quality of two products, he selects the one with the lowest price.

In judging the quality of education, subtle differences often elude the American bargain hunter; he detects little difference between the education which costs $300 per pupil per year and education which costs $400 per pupil per year, so he elects to protect his badly battered pocket book from higher school taxes.

If the quality deterioration which tends to accompany low expenditures for education were clearly apparent to the American voter, he would be less inclined to select the lowest priced model in schools. The people, the school board, and the professional staff of the school need a procedure in which they can consider various possible changes in the school program and the benefits, and cost of each change.

There are many obstacles to the proper functioning of this planning procedure insofar as it relates to schools. There are tax rate limitations which prevent a community from selecting a higher-priced quality of education. There are budget approval procedures which often interfere with effective communication concerning the school budget between the school staff and the voters. In a fiscally independent school system the communication between the school staff and the people is usually more direct, and hence the planning procedure by which the community decides how much it will spend for schools is less restricted.

Cost-Quality Relations Important

The legal procedure for approving school budgets and tax rates is not the only difficulty. School administrators in the future must devote much more effort to the study of cost-quality relationships in education. Too often programs and personnel concerned with the improvement of instruction are separated from fiscal realities. Proposals for the improvement of instruction often require additional resources or a reallocation of existing resources. These proposals, with costs clearly indicated, should be placed side by side and reviewed by everyone concerned so that wise choices in educational and tax policy can be made.

This process becomes more difficult when it is transferred from the community to the state capitol. Normally, proposals for the improvement of instruction with price tags attached cannot be reviewed effectively by a state legislature. Here the controversy usually relates to: (1) adequacy of the minimum or equalization program, (2) need for special financial support for neglected aspects of education, and (3) relief of excessively high local school tax rates. The change in character of the planning process when it shifts from the community to the state legislature calls for mutual understanding and cooperation between those responsible for the school financial program at both levels of government.

The billing process, the procedure by which a community decides who shall pay how much, is equally important. Opposition to school taxes often stems from a conviction on the part of some taxpayers that, although the schools may need additional money, the proposed tax is unjust. Some of these objectors are chronically opposed to all taxes. If a sales tax is proposed, they prefer an income tax; if an income tax is proposed, they prefer a sales tax. On the other hand, many taxpayers are willing to contribute their share toward the support of schools if, and only if, they are convinced that their share has been equitably determined. Unfortunately, opposition to methods of taxation is often expressed as opposition to the school budget.

Equalizing the Burden

To protect school budgets and be fair to taxpayers, procedures by which property valuations are established for tax purposes must be improved. Formulas by which state funds are distributed need to be reviewed to be sure they do not impose undue burdens upon some taxpayers.

It is often said that the school administrator should present school financial needs, but he should not recommend specific tax legislation. This counsel is unwise if it implies that he should ignore obvious inequities in school finance procedures. Not only his duty as a citizen but also his responsibility for protecting school revenue sources, obligates the school administrator to participate actively in efforts to improve school tax administration. However, if different tax proposals are equally sound, but affect different sectors of the economy, he may prudently avoid favoring one in preference to the other. ■

*Adapted from an address given by the author at the 1960 Convention of the American Association of School Administrators, Atlantic City, N. J.

Developing a Program for Technical Electronics

spurred by NDEA, many districts are setting up programs for training the technician. Early trends indicate heaviest activity in these programs in the area of electronics and here is a report on one approach

-- Associated Products and Service Co.

The impact of the Russian "Sputnik" on American education is beginning to have its first permanent repercussions. To provide the necessary technicians to work on the engineering team in industry, the Federal Government passed Title VIII of Public Law 85–864, in December, 1958, which is commonly called the "National Defense Education Act." This part of the legislation is to provide the training for highly skilled technical occupations in local industries associated with military or defense activities.

Studies have indicated that the creative work of engineers is moving farther away from the manipulative skills of the craftsman. It has been estimated that the engineer requires at least six trained technicians to carry on the related work of inventing, designing, production, and testing. The primary objectives of Title VIII of NDEA legislation is the training of these highly skilled technicians in occupations affected by scientific and technological developments which meet national defense requirements. The job title indicates

Representatives of Long Island electronics industry met with Levittown, N. Y., school officials to plan the district's new Electronics Technology Laboratory. At the head of the table (in the background facing the camera) are shown: Robert Hoshino, president of the board; Dr. B. J. Rappaport, supervisor of industrial arts and vocational education; James Riley, principal of Division Avenue High School where the laboratory is contained; and Fred Ambellan, Levittown superintendent of schools.

that the training is in a highly specialized scientific field requiring a broad knowledge of the subject and its application.

In the Long Island area of New York State, this shortage has been particularly acute in the field of electronics. Surveys of local industries conducted by education personnel have indicated that the need for electronic technicians is growing rapidly each year. Conversations with representatives of the State Department of Labor, the Area Development Council of the Long Island Association, and representatives of leading industries on Long Island have indicated that this lack of highly skilled technical personnel will increase rather than diminish in the ensuing years.

In the original preliminary application by the Levittown schools under superintendent Fred Ambellan to the state department of education requesting consideration for the allocation of funds to our district, letters from local industry endorsing the particular need for this area were enclosed as substantiating material to the district's claim.

Once the approval was received from the officials in Albany, the big program of organizing and selecting equipment and facilities, selection of students, development of instructional materials, and selection of the instructor had to be set in motion. It was realized that for any truly new electronics training program, functional in nature and meeting the needs of local industry, it would be necessary to work very closely with people in the industrial field. It was considered judicious that, rather than building a program entirely along the lines of other electrical programs in other schools, it might be best to involve the most advanced thinking of local industry so that the curriculum and materials of instruction would not be outmoded by the time the instructional program was under way. This would also pave the way for evening offerings for adult industrial training.

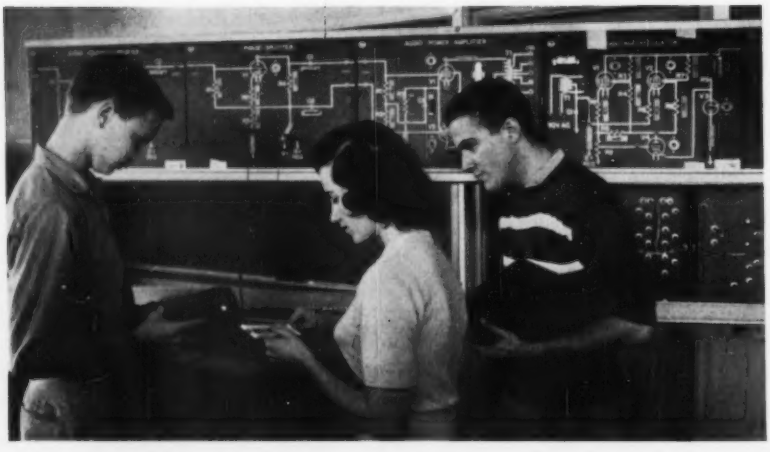
Industrialists Worked With Board

To insure success along this line, key people in local industry were invited to the Levittown board of education offices to work with the administration in planning the facilities. While all of these people were intimately interested in the scientific and technical knowhow of the final product, they also emphasized that students should be well founded in the basic fundamentals common to all areas of instruction. They pointed out that technicians must be able to read complicated manuals and interpret them correctly; they must be able to do the necessary research and their own planning; they must write analytical reports and do some creative thinking in their work. All this involves a solid academic background. In addition, they wanted the finest in technical education in the fullest sense of the word. One leader of industry indicated that the students should know "why a particular circuit operates, not only how." They should know the theory behind every component and should be familiar with all the test instruments so that their use in daily activities would become second nature. This thinking formed the initial pattern and provided the ground work for the development of the technical electronics program in the Levittown schools.

In working with these leaders of industry it was indicated that, in existing programs, too much time is spent in the study of rotating machinery. It was pointed out that the time may be more profitably spent in advanced study of vacuum tube and transistory circuitry. This, too, formed a pattern for the development of our equipment. Many of these concerns have their own training programs for upgrading employees. They indicated the type of equipment on the market which they found most suitable and which seemed to meet a distinct need.

At this point plans were formulated for the equipment and material needs of the physical facilities. A survey was made of existing education facilities. Many of the problems of installation of equipment and instructional handicaps noted by others in the field were taken into consideration. All along the planning stages, close contact was kept with the Bureau of Trade and Technical Education in Albany. From the time the contract was awarded until the deadline stipulated in the federal enactment, there were only four months to order, equip, co-ordinate, install and pay for the final product.

While action was being taken to equip the physical facilities of the technical electronics laboratory, action was being taken to select the proper students for this program. This is one of the most important phases of good technical education. Without the proper student personnel, any excellently conceived plan may ultimately deteriorate into a second-class program. Therefore, a co-operative course of action was planned with the secondary school principles in the district and their



Problems which must be solved before a program of this type meets current needs include: (1) knowing what kind of a technician you want to produce by designating specific courses for local needs; (2) setting up a curriculum to keep pace with changes in technology as well as with basic industrial needs; (3) selecting the type of students best fitted by intelligence and interests for this type of training; (4) purchasing the right, up-to-date equipment; and (5) finding the best qualified, technically trained teachers.

guidance personnel. Utilizing the available recommendations of the state department of education and other experts in the field, it was explained to these administrators that in order to succeed in an ultimately worthwhile program of technical education, it was necessary to secure students with a minimum of 110 I.Q. It was thought that students of this caliber were necessary to understand fully the technical and scientific information that is such a necessary part of this program. After explaining the philosophy and objectives of the program to these vitally concerned people, discussion resulted in recommendations which were to implement the selection of the student.

"While good facilities and students with a high potential are essential elements of any technical program, the key individual . . . is the teacher."

Interest Important

As a preliminary requisite, the guidance personnel decided that a minimum of 115 I.Q. was necessary. Second, as a result of the guidance aptitude tests given in the district, it was considered appropriate that the second requirement would be that the student place in the upper 25 per cent in every phase of a Differential Aptitude Test. These areas represented aptitude testing in verbal skills, numerical skills, mechanical skills, abstract relationships and special relationships. Not withstanding the fact that interest is of prime importance in motivation, these pupils who passed the preliminary screening were interviewed. At this time the broad objectives of the course were outlined to the students.

In essence the objectives were threefold: (1) the program is the finest college preparatory course available, (2) it presents an opportunity for preparation in a highly skilled technical field, and (3) it affords an opportunity to attain a position in local industry immediately upon graduation from school and continued education in an institution of high learning, with tuition paid by the company. This is the general policy of electronics firms in the Long Island area.

The program outlined meets a specific need in the Levittown, New York, area. Surveys in the past have indicated the following: (1) the average adult in Levittown has some college education, (2) over one half of all the students currently enrolled in the junior high schools have over 110 I.Q., (3) many of the High School graduates, who are qualified for college, do not go on to further education mainly for economic reasons, and (4) almost all junior high school students indicated their desire to attend college.

As described, the program meets the realistic need. It serves as a "dual-purpose" curriculum. The students are not only provided with the academic preparation for entrance into college, but also receive the technical information for highly skilled employment.

Once the students were aware that this program is a valuable asset for their acceptance by a college and that they would be prepared in the best manner possible for high-level skilled employment in industry, this technical program was something to be desired and achieved.

The pupils' interview sought to determine their interest, to evaluate their past scholastic record, and to acquire any other items of necessary information that could not be noted by previous guidance records and results of the testing program.

Those pupils who showed the aptitude, had the intelligence, had the interest, and had high standards of achievement in previous grades, were then subjected to a test designed to select pupils for scientific high schools. This battery of tests was graded by an outside agency and the final results returned to the school district. From these lists were the final students selected.

Program for Parents

Before final selection was made, an evening program was set up for the parents of these selected children. They were reinformed of the objectives of the program, and were given any opportunity to ask any questions. They were made fully cognizant of every aspect of the program. It was explained to them that these select pupils would work harder than other pupils. They would remain in school 45 minutes longer than any other pupils and would have no study halls in which to do their homework. They would fully utilize their inherent abilities and the school facilities. This was the final opportunity for any parent or child to withdraw from the program. It was further pointed out that this was a most desirable, educational program. It was indicated there were limited facilities for many children, and it would be unfair for any pupil to take away the space of another in lower standing on the eligibility list if this individual was not fully interested and did not evidence every indication of promise in completing the entire program. Following this meeting, the parents signed a statement reaffirming the desire that their child take part in this educational venture.

The classes were made slightly larger than necessary and educationally desirable. The purpose was to enable the administration to be more selective in the quality of the student as the program developed. With larger classes starting and with the normal rate of attrition, students leaving the district, and other causes,

(Concluded on page 57)

a discussion of a key-control system:
what it is, why it's needed, basic components, etc.

What's the Idea of Key Control?

WILLIAM ROUGH

Philadelphia, Pa.

Even harder than catching the proverbial greased pig may be the job of controlling him after you've caught him. Something analogous applies to keys: you can procure a cabinet or a case of some kind and install numbered hooks in it, then put corresponding numbers on your keys and hang them on the hooks — but this is a far cry from controlling the keys.

Key control is essentially an idea, and the concept of control envisions more than the mere establishment of a central location or repository for keys. Control implies effective methods and techniques for determining quickly and accurately if a given key is in or out of its place, where it is, what it does, who has it, whether it should be replaced or the lock changed, etc.

An adequate key-control system, in brief, not only shows when a key is missing but indicates how to *locate* the key and secure its *return*.

In large schools, where thousands of keys are in use, the necessity of a control system is obvious; yet even in a small school some sort of system is needed.

Basic Components

The basic components of a key-control system are a filing system combined with a security cabinet, a modern version of the old nail-in-a-wall arrangement where each teacher had a nail on which to hang his keys and spike his papers. The inclusion of a filing system with a visible index adds all the advantages and convenience of up-to-date methods and provides maximum security and faculty privacy.

Proper indexing provides the answer to unauthorized duplication of keys because, when keys can be numbered, or coded, arbitrarily, they become useless to persons who do not have access to the index. Even if the key cabinet were forced open, the keys could not be used if the index remained hidden.

Faculty privacy is ensured at Philadelphia's recently completed Moore Institute of Art by keying faculty offices within the classrooms differently from the classrooms themselves and by not issuing faculty keys to students, and vice versa.

"In a residence hall, provision must be made for the prompt replacement of lost keys," advised John Marshal, building superintendent at Moore Institute. "I've adapted our key-control system to handle this automatically. As for our over-all attitude toward key control, we regard a key as an item of inventory just as important as a desk, chair, typewriter, or other piece of equipment. A key-control system should be processed as carefully as a payroll."

Mr. Marshal nodded at one of four key cabinets which control some 3600 keys at Moore. "In this particular cabinet there are two keys for each lock we have, and all we need do to guarantee that there will still be two keys for each lock a hundred years from now is maintain the system."

Key Control a Modern Idea

Until recent developments key control had depended upon the ingenuity, or lack of it, by the person who fell heir to the job.

After the original installation of an effective key-control system, the only maintenance cost is for broken keys. In many cases the cost of installation is returned tenfold during the construction period alone by allowing the general contractor to control keys properly, thereby preventing thefts and detecting errors in the keying which later on would prove most costly.

For example, when 900 locks were installed in the Dixie Building in Cincinnati, the key-control system specified revealed many duplicate locks as well as duplicate keys for locks which were supposed to have separate keys. Catching these errors quickly meant savings which amounted to many times the cost of the system.

There is a growing awareness of the need for key control on the part of architects, general contractors, builders' hardware contractors, and lock companies. During construction work, an adequate key-control system will provide for the builders' hardware contractor to place all keys in the system *as locks are delivered and installed*. This eliminates problems of lost and damaged keys and of matching keys to locks.

At the completion of a construction project, the general contractor who has installed an effective key-control system can turn over to the owner all keys to every lock in one orderly unit. Every key will be clearly identified, indexed, and filed.

An effective key-control system can also relieve the general contractor of responsibility for master keys and code information and turn these over directly to authorized persons.

After occupancy of a new schoolhouse, the key-control system will control the key to *every* lock and keep *all* keys in authorized hands and maintain the security of the entire key system.

Improved methods and techniques usually also improve human co-operation and morale, which lead to a greater sense of security. In the case of effective key control, such security is actual as well as psychological. ■

It put a new sparkle in her eyes!

"We have Study-Centers now!
Are they nice . . . this one is mine!"

"YOU CAN tell it's mine, because it's just my size. See? My legs don't press against the edge of the seat. That's how you tell if it's not too high. We adjusted our seats and desk tops yesterday. I've grown an inch and a quarter since school started last fall.

"Does your desk top tilt like this one? If it doesn't . . . you should have a new desk, too. It's a lot easier to read when you don't have to hold your book up. But you better put the top down level if you ever work with clay. Billy Bartlett spilled his all over the floor one day.

"The top looks like wood . . . but it's really plastic. Plastic is better. I know . . . because my desk last year had a wood top, and some of the *boys* had carved initials and things in it. You should have seen Billy Bartlett the day he tried to mark this desk top. He broke his jack-knife. Was that funny!

"Our new desks have such pretty colors. I feel sorry for the boys and girls who have those dark, ugly desks like we used to have. It makes your eyes hurt to look at them.

"Guess how many more kids we've got in our class this year. Nine! But we're not a bit crowded. My seat turns both ways . . . just like the one Daddy has at his office. Only mine adjusts back and forth, too. His doesn't do that! Last year we had so many tables and chairs, and they were so close together that you had to squirm to get out of them. Honest. You should have seen us the day we had the fire drill. We were the last class out of the building.

"We move our desks around a lot. They're not heavy . . . and they've got little round feet, so the desks hardly make any noise when you move them. Sometimes we're in groups, and sometimes we're in rows. Sometimes we're allowed to talk, and sometimes we have to keep still.

"I wish I could take my Study-Center home with me. It's so comfortable. Mother's always telling me to sit up straight. If I had my own Study-Center, she wouldn't have to."

★ ★ ★

Think in terms of bright-eyed youngsters when the time comes for *you* to buy school furniture. Know who makes it . . . and why . . . and what it will do for students.

REMEMBER: Schools are built to give students a place to sit and learn (they'll *sit* 15,000 hours, kindergarten through college). School furniture is the *most important* single equipment purchase you're called upon to make affecting the physical and intellectual development of children.

O.K.? . . . . OR . . . . K.O'd?

Study-Centers give students a lift for life.

Eliminate posture problems of old-fashioned furniture.

The desk makes the difference! When you figure your children will sit 15,000 hours, kindergarten through college, you see how important school furniture is. It is *the* most important single equipment item purchased for both their physical and intellectual development. When American Seating's Study-Center costs less than a penny a week more than ordinary furniture, can you settle for less? Get all the facts now! Write for our free booklet.

AMERICAN SEATING

The standard by which all public seating is measured

GRAND RAPIDS 2, MICHIGAN

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6544—2

One of a series of public service advertisements currently appearing in LIFE, TIME, and THE SATURDAY EVENING POST.

a dynamic junior high school based on the physical and psychological needs of the adolescent —

Exterior views of Byron Junior High School in Shaker Heights, Ohio.

Shaker Heights' Byron Junior High School

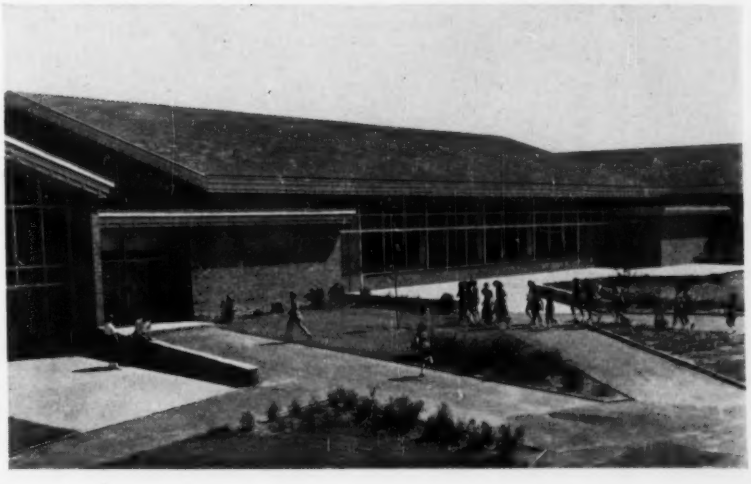
WILLIAM SLADE and MICHAEL M. KANE, A.I.A.

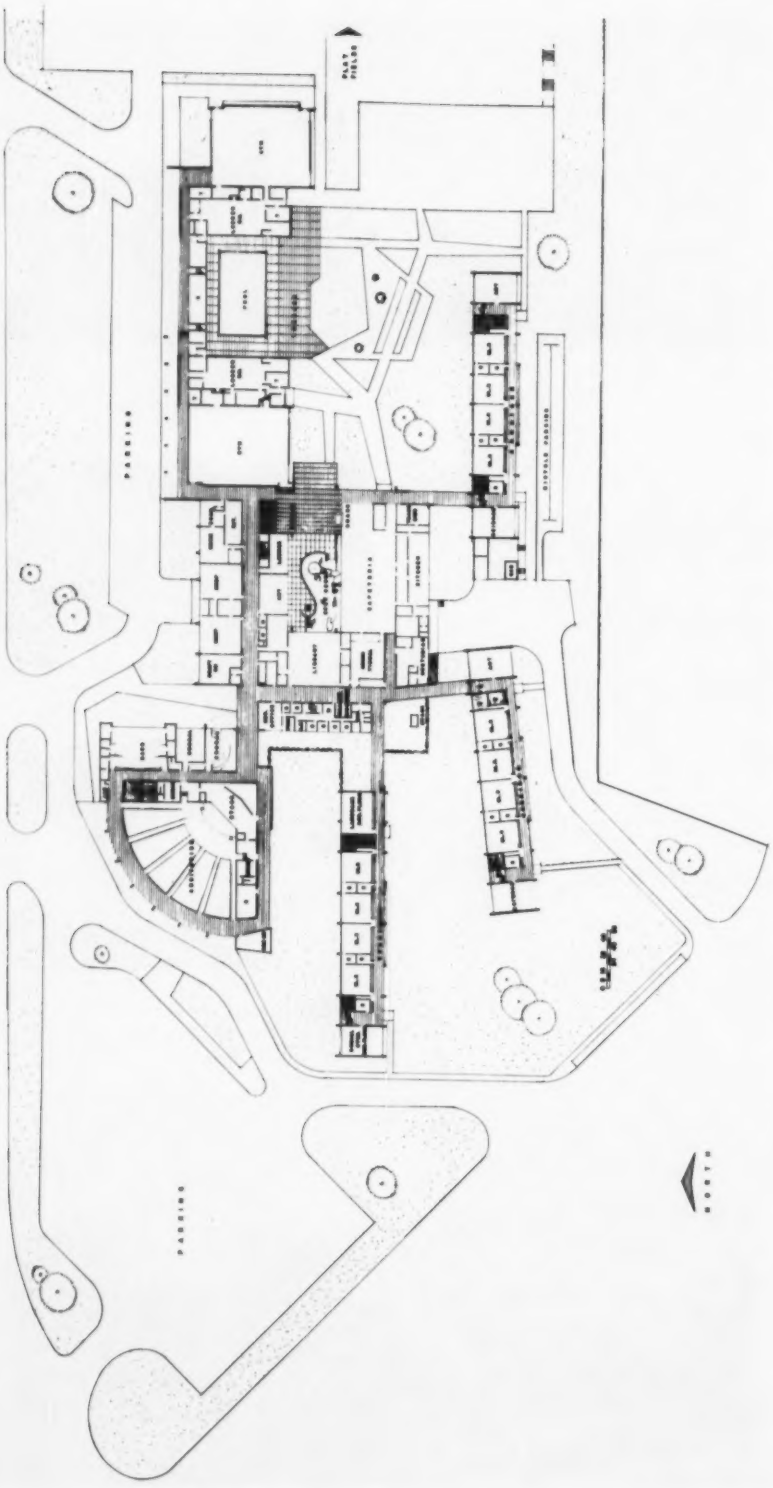
Architects were Perkins & Will of Chicago and Michael M. Kane of Cleveland.

Shaker Heights is a prosperous community, proud of the high standards maintained by its school system and of the college records of its high school graduates. It has developed a dynamic junior high school program based on the physical and psychological needs of the adolescent in his transition from dependent childhood to self-sufficient adulthood.

In extensive conferences the architects discussed needs and problems with the school authorities and the representatives of the community. Analysis pointed to an integrated and connected arrangement of units that would com-

Dr. Slade is superintendent of schools in Shaker Heights, Ohio, and **Mr. Kane** is with Michael M. Kane and John Kress, Jr., Architects of Cleveland.





bine for seventh, eighth, and ninth graders the security of the small group with the challenge of the larger whole.

The result is a school in which one is less conscious of "bigness" than of purposeful activity in which groups of students are intensely absorbed. Architectural design, in which the mass is broken into functional units, and in which traffic is broken into groups, help to make this possible.

Campus-Type School

Byron is a campus-type school on a 21-acre tract. Separate wings, each a school within a school, are connected to the central unit by window-walled corridors. In his own wing, the seventh-grader learns to paddle his own canoe at his own depth, with boys and girls of his own age, and at his own stage of development. But when he eats in the cafeteria, goes to the library or auditorium, or fraternizes in the student lounge, he comes to feel a part of the whole school.

The whole building reflects this philosophy. Byron is a spacious, open school where the student can move out of a tight family, class, or neighborhood situation; where he can explore new fields and find constructive outlets for his exuberant energies. But by eliminating a formidable façade, by using unpretentious materials, and by designing a structure that seems to cling to the ground on which it stands, the architects have given the insecure and tentative teen-agers a school-home which blends their aspirations for independence with the security they still require.

Designed for an enrollment of 900, Byron was built in two stages. The first stage, which includes the central unit, three classroom wings, and the physical-education unit, was built and equipped at a cost of $2,971,511. The auditorium-music building, joined to the northwest corner of the central unit, was added two years later, at a cost of $798,627, including site development, auditorium seating, stage rigging, and other equipment.

The Shaker Heights curriculum for junior high school students combines sound academic preparation with exploration aimed at discovering the interests and potentialities of each child. Both classes and extracurricular activities are set up to this end. Obviously such a program requires varied and extensive facilities.

The two-story classroom wings are designed for instruction in academic subjects. Each has 12 classrooms.

Corridors are on the south side of each wing. They are wide, window-walled, and furnished with window seats and display cases. Decorative color relieves any monotony. Actually glassed-in overhangs, these corridors are shaded in warm seasons, but admit the lower rays of the winter sun to flood the area.

Classrooms, designed for a maximum of 25 students, are conventional in size but seem larger because they are pervaded by light without shadows or glare. North walls are of glass. Windows above

locker height in the south walls admit light borrowed and reflected from the corridors. On the other two walls are chalkboard and tackboard. This treatment tends to eliminate any feeling of being shut in and makes the interior space more important than the enclosing walls. It enhances the versatility of the classrooms because the teacher can have the movable study chairs turned in any direction that the immediate learning situation requires.

Small conference or committee rooms off the classrooms permit the teacher to divide the class into groups and to give special attention to the slow or the fast learners.

One English-social studies classroom on the second floor of each wing has an elevated platform or stage, a device which helps to dramatize literature and history and to develop the student's poise and assurance as he stands in front of his classmates. These rooms are assigned to teachers with special training in dramatics and are used also for dramatics rehearsals and clubs.

A large science room on the first floor of each wing has space and equipment for lecture-discussion-demonstration procedures as well as individual student projects.

In the one-story central unit, the social center, cafeteria, library, art rooms, and teachers' lounge are grouped around an open, landscaped court. Shops, equipped for carpentry and printing, share the space on the north side of the building with home-economics rooms where sewing and cooking are taught in contemporary terms. Across an interior corridor, suffused with natural light from plastic skylight bubbles, are the administrative offices, student-guidance areas, and the health clinic.

At Byron, the library is recognized as the hub of the college preparatory program. It has shelf capacity for 12,000 volumes, record-playing rooms, an adjoining library classroom where the use of the "tools of learning" is taught, an office for the librarian, and exhibit space. A browsing corner with doors to the outside court invites lingering in this mentally stimulating atmosphere.

Byron was planned with community use in mind. Particularly significant is the fact that each unit can be entered and used independently with the rest of the building closed off completely. Off-street parking facilities are extentive, both in front of the building and adjacent to the auditorium. Modern equipment for mechanical and home arts, for music and drama, and for creative art is encouraging evening hobby classes.

At night Byron's windows are ablaze with lights. On summer days its playing fields and swimming pool burgeon with young people. The school is being used, not only for the junior high school program but for a summer play school program in which elementary and junior high school students from other schools are enrolled; for family nights in the swimming pool, for meetings of civic groups, and for hobby and adult education classes. ■

Above, a view of one of the science classrooms.

Right, the browsing corner of the library.

Below, the auditorium which seats 1003.

Tests prove

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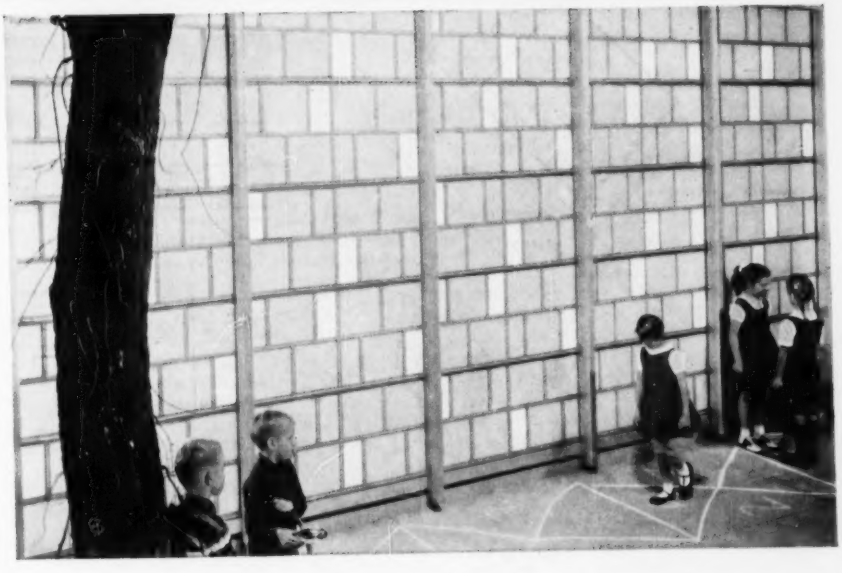

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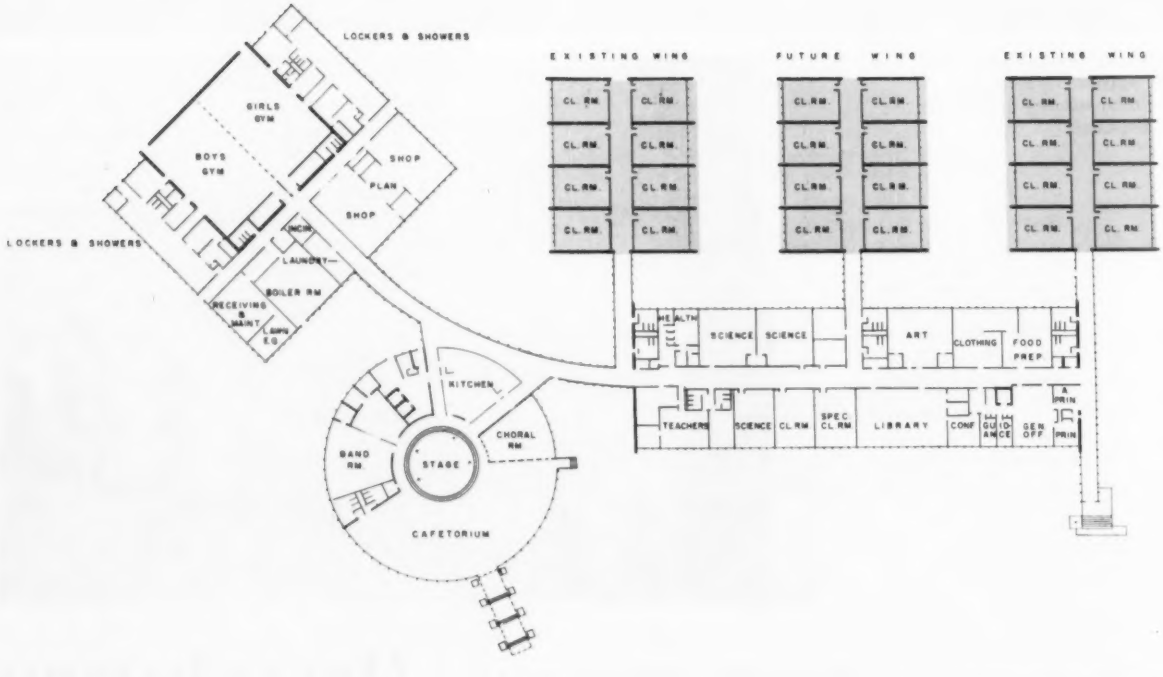
An exterior view of South Junior High School in West Chester, Pa. Architects were Howell Lewis Shay and Associates of Philadelphia. Superintendent of the West Chester schools is G. Arthur Stetson.

a junior high school designed for



facilities serving a well-developed program of a "horizontal-type" concept of team teaching —

Team Teaching

G. ARTHUR STETSON and JAMES P. HARRISON

Building facilities definitely aid or limit what can be done in educational programming. The school administrator today must be alert to the rapid changes in educational methods so that new facilities do not tie him to old methods. Several factors are causing these changes.

The recent emphasis on science is expending and increasing the need for laboratory facilities for science instruction. The demand for people who can handle a foreign language with facility is creating a demand for language laboratories. The development of large schools of a thousand or more pupils raise the question: "How does one treat a pupil as an individual in such a situation?" Electronic devices cause the imaginative teacher to devise new and better ways to teach pupils more effectively. Costs make the educator search for new ways to eliminate waste space and use necessary space more adequately.

West Chester has been growing from a small community where a secondary teacher knew all of the pupils in the school to a suburban community where such knowledge is no longer possible. How can this personal pupil-teacher contact be recaptured in a school of a thousand pupils? Several years ago the teacher team idea was developed whereby four teachers were made responsible for groups of 150 pupils each. This did two things. It became an excellent guidance device because the four teachers knew each of the 150 pupils personally as an individual. They could discuss them in a group meeting and give valuable help to the pupil. It also made possible a horizontal co-ordination of curriculum which is paying off in better instruction. The pupils really feel that they are individuals in the school and not lost in a mass of human beings.

Dr. Stetson is superintendent of schools in West Chester, Pa., and **Mr. Harrison** is principal of the district's South Junior School.

Three Basic Ideas

When it became necessary to build a new junior high school, three ideas were kept in mind and worked out with the architect:

School Within a School

1. To provide a "school within a school." This was resolved by a wing for each grade of the junior high school in which the pupils would meet for their four academic classes. These wings join the special-services unit where pupils go for library, art, homemaking, science, and health. The administration, guidance, and health suites are also in this unit. Beyond the special-services unit are the assembly, band and choral area, and beyond that the gymnasium and shop areas. The result is that extensive passing to classes has been cut to a minimum. Only 20 per cent of the pupils are ever out of a wing at a time.

Low-Cost Assembly Area

2. To provide an assembly area that would be low enough in cost and multiple use that the board would approve it. The cafeteria provided the assembly space. The concept grew from the site formation — located at the top of a rise so that one gets a five- or six-mile view of southern Chester County sweeping from the east through the south to the west. A cafeteria located here could utilize this view. Instead of a rectangular room, it was decided to develop a circular room for better utilization of space and to save exterior wall. The board had turned down an auditorium in the senior and former junior high school buildings as being too costly. Cafetorias had been built before; that is, cafeterias had been built with a stage at one end to serve as an auditorium. This arrangement had never been made use of because the acoustics were not good. This time the process was reversed. An auditorium was built and a cafeteria was placed in it. Therefore, this new building has a circular auditorium, acoustically perfect, with a round stage and band, choral, storage, and kitchen areas leading from it. This arrangement has done two things. First, it has used a single space for two purposes that formerly required two separate spaces. The short time it has been used has shown us that this space is very flexible as to use. Second, it has saved the taxpayer many thousands of dollars. Cafeteria tables came on the market at this time which could be used either as tables and benches for the cafeteria, or the tops could be turned and used as backs for benches for assembly use. This means that the area can be set up for either cafeteria or assembly use in a very few minutes.

Team Teaching

3. To provide for team teaching. Team teaching helped to individualize the program. Four teachers were given rooms together — two rooms on each side of the hall. These pupils, therefore, have to walk but a relatively few feet most of the time in passing from class to class. This means that these pupils get to know each other and the teachers know them. A conference room for the team of teachers to use on school time was provided near the office, guidance suite, and library where all necessary records are easily available. The result is a personalized form of education where four teachers thoroughly know the same 150 pupils and work together as a group to give these pupils the education and individual attention each needs.

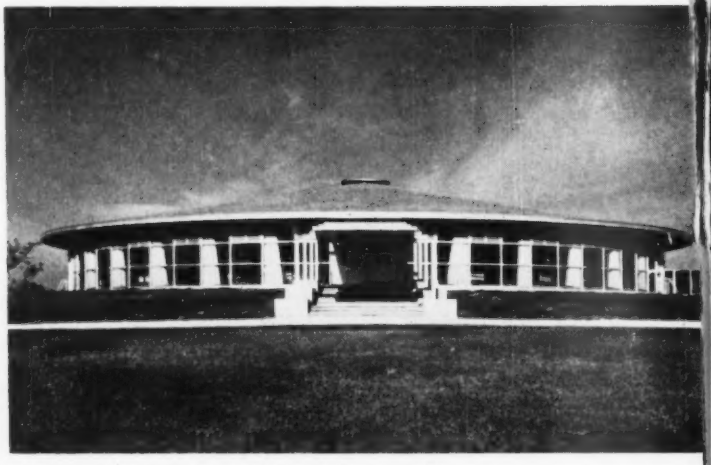
Team Teaching Concept

There are various types of team teaching. The one West Chester has developed is a horizontal-type program.

A typical classroom.

The general science room.

The woodworking shop.



Above, entrance to cafetorium from parking area.

Below, a view of the corridor leading to east wing.

Several years ago West Chester schools instituted a system of block scheduling whereby the same group of teachers taught the same group of students in each of the junior high school grades. Once a month the teachers met at the conclusion of the school day to discuss the progress of individual students, to confer with parents, or to review mutual teaching problems. The hour of the day and the length of time between meetings were detrimental to an otherwise good educational practice.

Initially called block scheduling, later referred to as a "school within a school," the refined program, as it is now carried out, is called the team teaching plan.

Teachers of each major academic subject — history, mathematics, English, geography, science (in grade 9) — comprise a team. They instruct the same five sections which have been grouped on the bases of reading level, intelligence, achievement scores, and teacher recommendations.

Each member of the team is scheduled for 20 periods of classroom instruction a week. This simply means that the academic classes meet four times a week in 50-minute periods. Team conferences are then scheduled for three double periods a week meeting on three different days. At the end of the first marking period, the team meeting schedule is revised from three double periods per week to two double periods or one double and two single periods.

Serious consideration is given to the formation of a teaching team. It is of prime importance to have compatible teachers working with fellow team members. Close contact is maintained among the teachers through team meetings during the school day. This frequent exchange of ideas and procedures, and the proximity of the teachers' rooms, necessitates a congenial group. This point cannot be overstressed. The success or failure of the team teaching plan hinges on the selection of team members.

Each team meets at the beginning of the school year in an organizational meeting to select a chairman and a recorder. The chairman arranges the agenda for all meetings and bears the responsibility of providing leadership for the group. The recorder maintains a notebook of minutes of all meetings. Team meetings are held in a conference room adjacent to the guidance offices and the general school office. All student records are nearby and accessible.

During the first six weeks of the school term, the team meets for the maximum scheduled time of three double periods. Much of the time during the initial marking period is devoted to familiarization of students and teachers, development of a policy manual for students, and a discussion of students to be resectioned at the conclusion of the marking period.

The Policy Manual

The policy manual is developed by the teaching team, and a duplicated copy is prepared for each student's notebook. It contains policies to be followed within their "little school." Briefly, a typical manual establishes standards in the following areas of classroom preparation: (a) homework, (b) form of daily papers, (c) preparation of notebooks, (d) detention, (e) use of room and lavatory facilities, (f) testing procedure, (g) study-hall procedures, (h) arrangements for extra help, (i) spelling requirements, (j) parental conferences, and (k) student conferences.

At the conclusion of the first marking period the team discusses the progress of each student. If it is found that a student is superior to his present group and would profit by the challenge of a higher ability group, he is considered for resectioning. The reverse also happens to those children who are not functioning at the level of their group and who are considered for a move to a lower ability section.

This review of sectioning at the end of the first marking period provides for the child who has shown rapid maturity over the summer or an increased interest not evidenced during original sectioning. Resectioning is made at the end of the sixth week, occasionally at the twelfth week, but rarely after this point in the school term.

Such transfers are not made, however, until after all teachers are in agreement; counselor interviews have been held with the child; parents are given an explanation; and the administration has approved the transfer.

Sectioning Procedures

Sectioning of children into ability groups is done at the conclusion of each school term in preparation for the opening of school in September. A committee of teachers is appointed to section the incoming seventh graders. To facilitate this procedure, the elementary teachers forward a "Sectioning Abstract Card" for each child. This card includes information on the child's mental maturity, reading level, achievement level in each academic area, and a recommendation from the elementary teacher for a particular ability grouping. This card proves invaluable to the sectioning committee in its attempt to place the child in his proper ability group.

A sectioning committee is also appointed to section all future eighth graders, and another committee performs the same function for future ninth graders.

In this sectioning process, the children are grouped into high ability, high average, low average, low, and special education. In the seventh grade, 50 to 60 children possessing the greatest talent are divided equally into two sections on the basis of factors enumerated previously. These sections then constitute the high ability groups. Similar procedures are used to establish the other ability levels with approximately 30 to a section.

In the eighth and ninth grades, an attempt is made for greater sectioning refinement in the high ability groups. Having the experience of working with the children previously, it is now felt that they can be sectioned by subject within these groups. These 50 to 60 talented children are then placed in classes on the basis of their abilities to perform in particular subject areas. This means that a child may be placed in the more talented mathematics class and possibly in the less talented history class. It is obvious that several possibilities may exist.

The teaching teams are expected to know their students—their backgrounds, their interests, their abilities, and their aspirations. Systematically, the team evaluates the performance of each pupil to determine whether he is achieving academically at a level reasonably related to his capacity. When it appears that a pupil is not achieving adequately in terms of his capacity, a plan is developed reflecting the team's thinking on the child's strengths and weaknesses. An appointment for a parental consultation is deemed essential. Many parental conferences are scheduled. However, these are not out of an academic need but of the mutual desire of the parent and the teachers to become acquainted for the best interest of the child. If the services of other members of the school staff are needed, the team is encouraged to call upon the guidance counselors, the school nurse, the reading consultant, the speech clinician, other subject area teachers or consultants, and the principal.

Observing Team Teaching

The teaching team regularly makes note of the level of personal and social adjustment of each child as observed. They attempt to guide the child through conferences with him, or referrals are made to the counselors. A new student transferring to the school is met by his teachers in a team meeting within his first week of enrollment. It serves as a get-acquainted time. Children are encouraged to take full advantage of the school program through participation in musical, club, athletic, intramural, governmental, and social activities.

The team maintains a summary of each parent or student conference in a card file. This file is available to the nonacademic staff members who find it impossible to attend team meetings. In this way the entire staff can be kept informed of the outcome of these meetings. Since the composition of team personnel is altered somewhat from year to year, these summary cards for grades 7 and 8 are distributed to the new teaching teams at the beginning of each school year. This permits each current team to familiarize itself with prior problems and maintain continuity of action. The summary cards for grade 9 students are placed in the cumulative folders which are passed on to the senior high school.

Team meetings become actual extensions of the school guidance function. Each team meets with a guidance counselor once a week for an exchange of information on student progress and adjustment. This also serves as a briefing for the team by the counselor on guidance techniques in the area of parental conferences, student conferences, referrals to guidance counselor, sources of

information in school records, interpretation of statistical data in the area of standardized testing, and the implementation of a program to help the child.

The principal meets with each team once a week. These meetings are discussions of timely school events, administrative planning for the future, budget planning, and mutual plans relative to curriculum co-ordination.

Team chairmen meet monthly with the principal to exchange ideas and coordinate the activities of the teams. This communication avoids isolated units unaware of the activities of other groups. Further communication is maintained among team chairmen, department heads, and the administration by periodic meetings to discuss vertical and horizontal curriculum articulation.

In the future we contemplate a concerted effort toward horizontal curriculum co-ordination. This, we feel, is our great challenge. The subject matter to be taught within a team will be co-ordinated to give a more integrated curriculum utilizing the strengths of the subject specialists. The areas of art, music industrial arts, and home economics are beginning to gear their programs to facilitate the transition from detached units of instruction to those vitally interested and complimentary to the curriculum plans of the team. All of this will bear relationship to future plans for large and small group instruction to be performed by the "little school staff."

The team teaching plan possesses unlimited advantages within its pattern of organization. A brief summary will indicate that new teacher orientation is fulfilled with relative ease in such a plan. The new teacher on a team can constantly rely upon experienced staff members of the "little school" for direction. A decided improvement in over-all school discipline has been wrought by this decentralization and concern for a smaller group of children. Improved student-teacher and parent-teacher rapport is obvious. The time allotted for parent and student conferences is used wisely, and the values that accrue have been reaped for better home-school understanding. The policy manual has influenced uniform classroom procedures to permit easier adjustment for the child. By far the most significant impact on our school has been the amount of concern shown for the individual. Teachers are sensitized to the need for understanding individual pupil adjustment problems and have responded to the challenge. Their task has been definitely eased by the team meeting time alloted within the school day.

The West Chester Joint High School Board, in a display of confidence in team teaching, has constructed a modern junior high school to accommodate this philosophy.

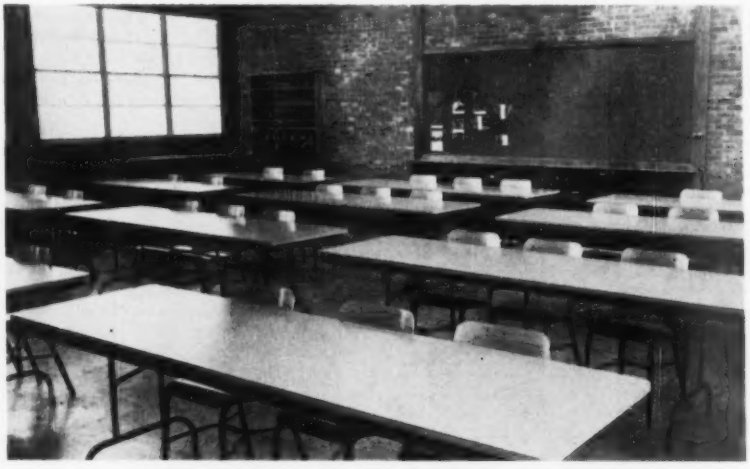
As Dr. Herold C. Hunt remarked in the dedicatory address of this new school plant, "I should like to say to all of you with great sincerity that I do not recall that I have ever seen as much school represented so attractively, nor purposes served in a more utilitarian fashion that I have here." ■

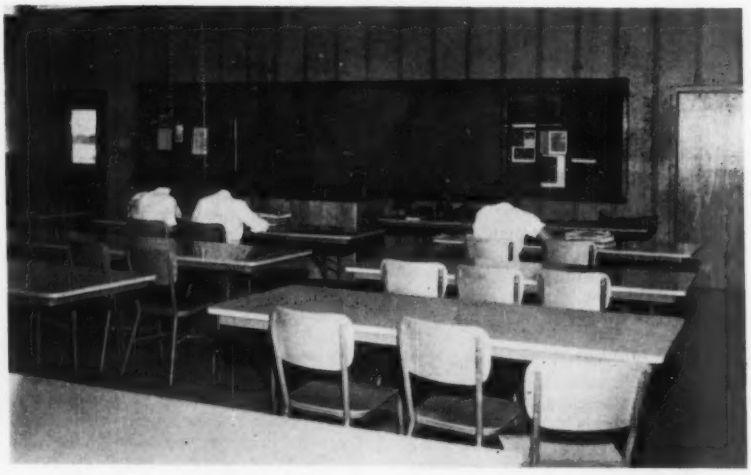
A Science Building on Budget Financing

Prior to preparing plans for the new administration-library-science building at Edcouch-Elsa High School in Edcouch, Tex., several discussion sessions between the board and the superintendent disclosed the following needs:

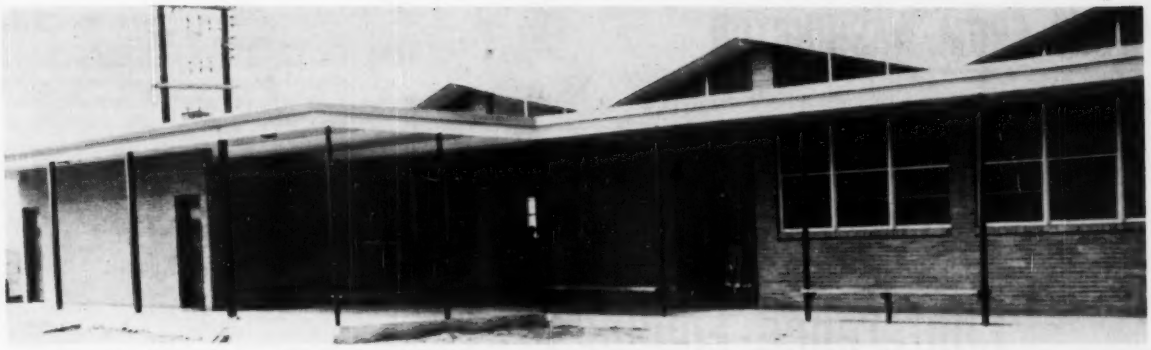
1. New administration offices to provide larger spaces and to free present space for other administrative uses, by the principal and school nurse.

2. A new library area to provide more facilities for a growing library plus a room available for student or administrative conferences. Also, a study hall is





Two views of the biology lab. Above, work tables, bulletin board, and storage shelves. Below, teacher's demonstration desk and sink, and low-desk area for the use of microscopes.



Exterior view of the new science building in Edcouch, Texas. Architects were C. Lyman Ellis, Jr., and Co. of Harlingen, Texas. Superintendent of schools in the Edcouch-Elsa Independent School District is A. L. Peay.

provided adjacent to the library. This will free existing library space to provide two classrooms.

3. New science rooms with new equipment to replace the present science room with obsolete equipment. Since biology is required for graduation it was decided to provide one large biology room and a combination science room for chemistry and physics. Combination storage and teacher office space was provided for each science room. Also included was an area suitable for showing films to small groups. Vacating the old science room will provide an additional classroom in the existing building.

Because of the crowded conditions of the campus, it was decided to plan all of these various elements in one basic plan which could be constructed in stages as funds became available. The new building has been placed in the space available at the west side of the campus.

In preparing plans for the new building, there were four basic considerations that governed the plan and design:

1. It must be planned so that it could be built in stages.

2. It must be of semifireproof construction.

3. It must be of economical construction with laboratory rooms large enough to handle lecture classes as well as laboratory classes.

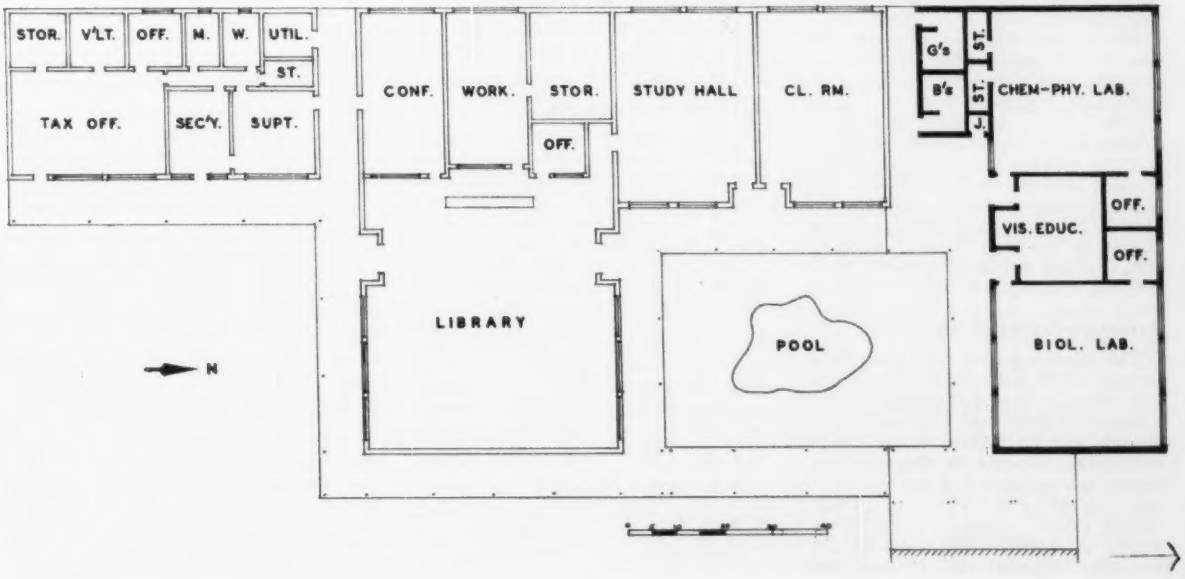
4. The exterior reflects the "pitched-roof" construction of other buildings on the campus and still utilizes flat roof construction as far as possible.

The building includes a biology laboratory and a combination chemistry and physics room, each with an adjoining office for the teacher; an audio-visual room with exhaust fan and blowers for ventilation; separate storage rooms for chemistry and physics; a janitors' room; boys' and girls' restroom; a connecting walk to adjacent buildings; and benches.

When the entire building has been completed, the library will have a pitched-roof treatment the same as the science rooms and all other areas will match the flat roof of the covered walks on the science wing. The patio with pool area formed within the covered walks is planned for outdoor biology class use as well as a spot of special landscaping.

The school district acted as its own contractor for this building and employed a foreman and crew who worked under the general supervision of the superintendent. C. Lyman Ellis, Jr., of Harlingen was the architect, but was employed only for providing the plans and specifications. This is the eighth building added to the facilities of the Edcouch-Elsa schools in the past nine years, using the do-it-yourself method of construction.

Total cost of the building and equipment was $46,181.42. Cost per square foot was $8.94. ■



White House Conference Findings

ELAINE EXTON

"Every minute, every meeting has been memorable and meaningful!" These words spoken at the closing session of the Golden Anniversary White House Conference on Children and Youth echoed the thoughts of many of the delegates and lingered in their minds as they headed for home.

The Conference which met in the nation's capital from March 27 through April 1, 1960, was the largest in the series that has been called by a President of the United States every ten years since the administration of Theodore Roosevelt. A record 7602 persons participated, including over 1200 young people between the ages of 16 and 21, and 500 delegates representing 73 foreign lands.

To accommodate this large number of participants and provide a channel for democratically-arrived-at findings, the Golden Anniversary Conference used a more elaborate organization setup than any of its predecessors which some termed "unwieldly" and others described as "organized chaos."

Some idea of the complexity of the arrangements can be gleaned from the fact that between President Eisenhower's opening message on Sunday night and the concluding remarks of Secretary of Health, Education, and Welfare Arthur Flemming five days later as many as 800 separate meetings convened in 80 different buildings.

Recommendations Process

The discussions in the 210 Work Groups which met concurrently on the first three Conference afternoons yielded a harvest of more than 1600 recommendations and statements of belief. In progressing through the intricate Conference process each had been voted on and accepted by at least one of 18 concurrent Forums made up of the membership of about a dozen Work Groups averaging 35 persons each who had been drawn from various walks of life and professional disciplines.[1]

Stress on Human Rights

In analyzing the Conference action at the final Plenary Session, Ruth A. Stout, immediate Past President of the National Educational Association and Director of Field Programs for the Kansas State Teachers Association, said that more resolutions were drafted in the area of human rights than any other, more than half of the Forums having sent in recommendations on this subject.

The approved resolutions aimed at ending racial discrimination in education ranged from a recommendation urging President Eisenhower to "use all means at his disposal" to speed public school desegregation throughout the nation to a plea that "Negro students be supported in their fight for equality" and an endorsement of "the nonviolence sit-in demonstration" by students protesting inequalities.

Resolutions on Education

"It was also obvious," Dr. Stout reported, "there was great concern by the delegates for the rights of children and youth as individuals." After this, she stated, "more resolutions were made on education than in any other area."

The recommendations originating in the 14 Work Groups comprising Forum XII on *The Young as Learners and Thinkers* dealt with the gifted as well as the average student, the slow learner, and the mentally retarded, and with rural as well as urban youth. Their proposals included education at all levels and grappled with problems ranging from the elementary and secondary school curriculum to educational facilities and teacher training.

Resolutions on education were also adopted by a number of Forums whose Work Groups' members had been given some other topic as their main assignment.

Forum XVIII on *The Young With Social Handicaps*, for instance, by voice vote reaffirmed its belief in the separation of church and state in the public schools. Forum IX on *Beliefs* after heated debate voted 206 to 147, with seven abstaining, to request "that children and youth be granted greater opportunities for specific religious education in many weekday activities, including released-time or dismissed-time from public school and outside of public school property, for programs under the supervision of local religious bodies."

The Forum on *Mass Communication* urged that "teacher-education institutions increase and improve courses in TV and Radio communication and methods of utilization in the classroom" and called for "public and private financial support at the local, state, and national levels for the further development of noncommercial educational television stations." Another of their adopted resolutions asked the President to "consider appointing a high-level advisory board whose function it should be to make recommendations to appropriate agencies regarding content of radio and TV programming, especially as such programming affects children and youth."

Among other Forum-accepted proposals were such emphases as achieving a proper balance between creative learning and the assimilation of facts in the education of children (Forum X, *Moving Toward Maturity: Birth to Puberty*); assuring that every secondary school should have sufficient trained professional counselors to deal with adolescent problems (Forum XI, *Moving Toward Maturity: Puberty to Young Adulthood*); inclusion in the secondary school curriculum of educational experience which will provide young people with an understanding of our American economic system (Forum XIII, *The Young as Doers*).

Federal Aid Endorsed

That two Forums "came out with specific resolutions favoring Federal-shared responsibility for the public schools of the nation, including colleges," was announced by Ruth Stout, the Conference summarizer, in her review of action highlights.

Commenting on this action in his closing address, Secretary of Health, Education, and Welfare Arthur Flemming said, "I would want to give this specific proposal further study," but "it is certainly headed in the right direction. . . ."

Holding that "the time has come for us to obtain agreement on what should be our investment in education as a nation over a period of the next five or ten years," he declared, "we must also seek to work out an agreement . . . as

(Concluded on page 58)

[1]For a more detailed account of the Conference process and program, including the selection of delegates, see "The Golden Anniversary of the White House Conferences on Children" in the AMERICAN SCHOOL BOARD JOURNAL for December, 1959, pp. 40–41.

the
AMERICAN
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OPEN MEETINGS

FROM as widely separated states as Arizona, Massachusetts, and Washington come reports of criticisms of school boards for concealing details of school affairs in secret or executive meetings. It is also clear from the discussions that there are still school boards which have not adopted maturely defensible policies in the conduct of their meetings. Political purposes and petty personal attitudes are evident in these cases in the continued conduct of public school business behind closed doors. In every instance the criticisms of the boards point to the fact that the secrecy has aroused wide suspicions and antagonisms which locally lower respect for the boards and seriously harm the morale of teachers and administrators.

The strictures of the newspapers and of local citizens' groups do not seem to be fully warranted in at least one instance because the problems discussed related to teaching or administrative personnel, and the reticence of the school boards was intended to a considerable extent, to safeguard the professional futures of the school staff members. The persons involved, as well as the local citizens, however, objected to secrecy and were apparently willing to let the public pass judgment on themselves as teachers or supervisors, and on the school boards.

Wisconsin has a new law which should help school boards decide on a justifiable policy of open meetings. The statute requires all public bodies in the state to hold their meetings and those of their committee in open session to which the public must be admitted. While the press is not mentioned in the act, it is assumed that reporters as citizens are entitled to attend. The law forbids expressly any formal action of any kind to be introduced, discussed, or acted upon, except in open session. No such action can be undertaken in a closed or executive meeting. The law allows six exceptions for which understandably the doors may be closed. These are: (1) deliberations after a trial of an employee or other person (e.g., a teacher or a pupil); (2) the employment, dismissal, or disciplining of an employee; (3) consideration of a parole, probation, or detection of a crime; (4) discussion of a plan to purchase property or to invest public funds; (5) the records and files of personnel; (6) meetings of public bodies or their committees with their attorneys.

It appears to be extremely late to suggest the necessity of a law such as Wisconsin is enforcing. Still that necessity exists and a clear-cut statutory requirement will remove temptation from the small minority of school board to engage in behind-the-doors activities which make the board members and their professional executives suspect of unfair dealing. In itself the open door policy will not completely solve the problem of public confidence in or respect for the school authorities. For better relations with the public, it is necessary for the boards and superintendents to do an effective and economical job of administering the schools and of establishing friendly attitudes on the part of the whole staff toward the public and the press.

A TEACHER'S COMPLAINT

IN SPITE of the frequently proclaimed democratic procedures in school administration, it is a fact that in numerous school systems the teachers feel that they deserve to receive greater consideration in the development of local school policies and programs. A statement that reflects this feeling is found in an article in the May, 1959, issue of the *Phi Delta Kappan*, in which Bruce McDowall, a Sheboygan, Wis., teacher complains:

> "Much that has been said in the so-called 'controversies in education' has been written by college professors and school administrators. As is so often the case, the classroom teacher has not been consulted. Since he is 'on top' of the situation, it would seem that he should be well qualified to state his views regarding current problems in education.
>
> "I think that we teachers are partially at fault for the absence of material stating our viewpoints. A combination of overwork, laziness, and the fear of saying anything which may label us as 'progressives,' 'reactionaries,' or 'troublemakers' no doubt accounts for the absence.
>
> "This teacher is going to depart from the norm, however, and take the proverbial bull by the horns. But before launching into my tirade, I want to make something clear. I have had a great deal of contact with college professors and school administrators. As a group, I have found professors of education to be kind, well-meaning, and genuinely gracious people. Their one shortcoming is the inability to relate theory to reality.
>
> "As for school administrators, I have had the good fortune of working for the most part with honest, capable men. Their greatest failing has been to accept without question the theories of the education professors."

Mr. McDowall may be correct in his observations, but his complaint should recognize the fact that teachers are not "partially at fault": they are mainly at fault. True, many are fearful of reprisals on the part of their professional superiors. Most of them, however, are too indolent or too narrow in their viewpoints to make themselves felt as a constructive influence. They do not take the time to really study the over-all results of a change which they feel to be necessary; they do not spend the time and the effort to explore correct theory which must underlie a new program or a new teaching method; they fail to take into account the vast variety in conditions which exist in schools other than their own; and occasionally they propose ideas which are, in the slang term, just old hat.

School boards and superintendents, and even college professors, would be happy to have all teachers take a deeper interest in the administration of the local school system. Under the leadership of a thoughtful man like Teacher McDowall, it is certain that practical views would not only be heard respectfully, but accepted so far as possible. In any school system administration is helped by two-way communication.

BE YOURSELF

SCHOOL board members should write their own speeches based on their study, experience, and observation. They have no solid reasons for employing a ghost writer and appearing to have a technical knowledge of school administration such as professional schoolmen possess. Ghost writing in business and industrial life is a reflection on the intelligence and basic culture of our business and civic leaders.

Politicians may be excused in a limited sense for employing ghost writers. Most of their public utterances require the touch of the professional public relations man, or even of the diplomat, in order to produce the exact effect of their deeper purposes. School board members, in the vast majority of cases, are interesting and effective when they express themselves in their own language. ■

Impact and fire resistance are twin features of this Polished Misco Wire Glass installation in Tennessee School for the Deaf, Knoxville, Tenn. *Architect*—Painter, Weeks & McCarty, Knoxville, Tenn.

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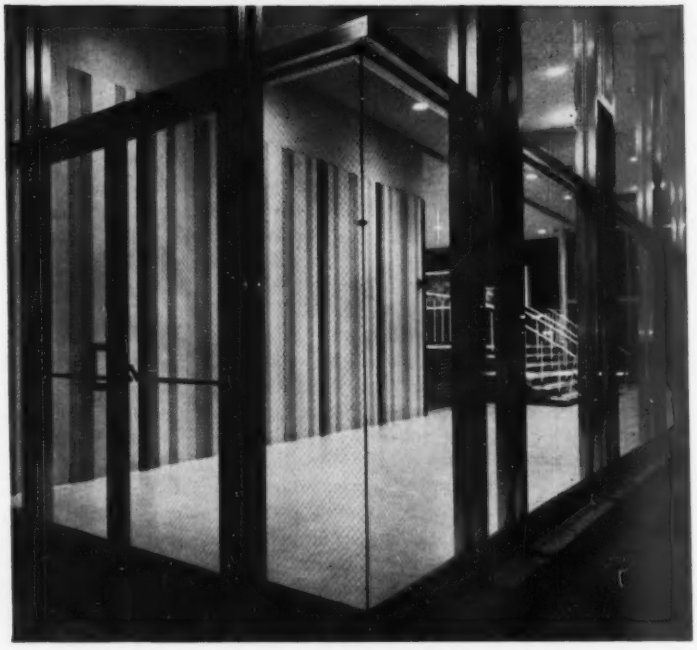

Polished Misco Wire Glass glazed in main entrance of Hellertown High School, Hellertown, Pa. *Architect*—Heyl, Bond & Miller, Allentown, Pa. *Contractor*—Gottlieb-Schneider, Bethlehem, Pa. *Glazing Contractor*—Penn Allen Glass Company, Allentown, Pa.

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TEACHER SUPPLY AND DEMAND

(Concluded from page 19)

demand problem is in the division of the total supply produced annually in accordance with the division of the demand, rather than in gross numbers alone. Certainly every college student should continue to exercise complete freedom in his occupational choice, but it is the clear responsibility of counselors, teachers, and administrators to keep abreast the changing conditions and to make sure that every student is provided with a factual basis for making his choice.

The year-by-year reports of the oncoming new supply of teachers have only limited meaning. The gross figures must be refined by answering these questions: What happens to the "supply" when these college graduates enter the labor force of the nation? Are the local schools able to compete successfully for their services? Just how many of the newly eligible graduates become candidates and accept teaching positions?

Beginning in 1953, the NEA Research Division has developed a procedure by which each college accounts for its graduates in terms of their occupational choices. The importance of these facts for use in student counseling is recognized on many campuses. Table 2 shows the occupational distribution of members of the class of 1959 who met the requirements for the standard teaching certificate.

Among those prepared for high school teaching, the low is in agriculture, where only 46.3 per cent were actually in teaching positions in the school year following their graduation. Women in physical and health education was high, with 78.9 per cent in teaching service. Of the whole group prepared for high school teaching, classrooms claimed the services of 66.4 per cent; the loss was one of every three. Of those prepared for elementary school teaching better than four of every five, 82.3 per cent, actually entered service.

Other gainful occupations attracted as many as 21.2 per cent of the potential agriculture teachers, 18 per cent of the potential teachers of commercial subjects, and 11 per cent of the home economics majors, but only 3.5 per cent of the art, 4.6 per cent of the English, and 4.7 per cent of the foreign language majors. Only 1.3 per cent of those prepared for elementary school teaching entered other gainful occupations.

There was less range in the per cent of those continuing with formal study; 13.1 per cent in foreign language, 8.5 per cent in science, 7.7 per cent in social science, and 6.1 per cent in English, but only 2.5 per cent in home economics and only 3.5 per cent in commerce. Here again the loss of potential elementary school teachers was only 1.3 per cent.

The impact of future calls for military service will probably be dictated by swings in international relations, but there can be no doubt about the importance of the urge to make homemaking a full-time occupation immediately after college graduation. This accounts for 10.9 per cent of the potential home economics teachers, 4.9 per cent of those in women's physical and health education, and 4.4 per cent of the total group prepared for elementary school teaching.

This evidence of specific losses in the new supply certainly sharpens the realization that many districts can scarcely hope to maintain the present quality of instruction unless they are provided with greater resources. It is a recognized fact that the American economy requires a much large reservoir of highly trained manpower in many fields of specialization. Schools can obtain their needed share only in the open market.

values of an ultrasonic detection device

How Dayton Minimizes Vandalism Losses

Dayton, Ohio, faces the same school vandalism problem plaguing every American city. The story of broken windows, rifled desks and coin-operated machines, stolen athletic equipment, and the theft of tools and supplies during "closed" hours is an old one to the Dayton board of education.

According to Mason Bagwell, assistant superintendent of schools, in recent years the bill for broken glass alone ran to $25,000 annually. However, not all "break-ins" are malicious in intent. Sometimes, he states, illegal entry is made simply to use recreational facilities such as gyms. However, this unsupervised recreation activity resulted, in one case, in the need to refinish a gym floor at a cost of $300. In another, open doors and windows resulted in extensive rain damage.

The problem of overcoming nighttime illegal entry is complicated by the fact that most schools are located in quiet residential or semirural areas. Even in built-up sections, schools are set back in parklike areas, shielded by trees, shrubbery, and playgrounds. The possibility of "chance detection" by passers-by or patrol cars is limited.

In the fall of 1956 after reviewing losses, the Dayton school board equipped McGuffy School with ultrasonic burglar detection devices.

The basic plan was simple. "Most schools are built in a basic 'H' shape," Mr. Booher states. "The normal method of entry or movement through the building can be controlled from a few points where there are outside doors, stairwells, or corridor intersections."

Detection Equipment Installed

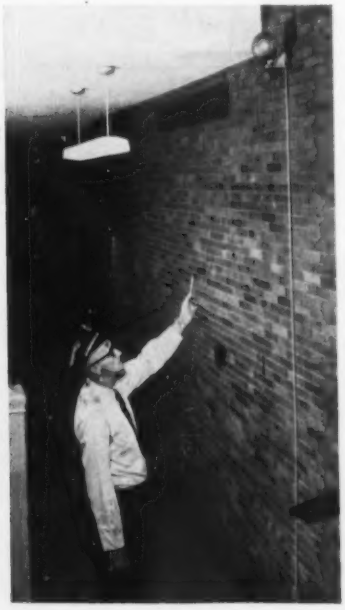
At these key points ultrasonic detection equipment was installed. The equipment comprises two units each about the size of half a softball. One transmits sound at a frequency of 19,200 cycles per second while the other receives it. This sound frequency is too high to be heard by the human ear and floods the protected area. As long as there is no movement in the space, the frequency remains constant and "all's well." However, let a person pass through the space and his movement alters the frequency and causes the equipment to signal "intruder."

For areas impractical to guard ultrasonically, electrical contacts were installed on doors which are broken if the doors are opened. Breaking the electrical circuit signals an alarm.

In the case of the McGuffy School, alarms are transmitted to the downtown central station of Dayton Electronics Alarm and Signal. The central station, via direct telephone line, informs the Dayton Police Department. Each dispatches officers to investigate.

Results of the test were successful. The actual record speaks for itself — 11 intruder alarms . . . 18 people apprehended . . . almost no loss or damage!

Today 9 out of the 10 Dayton high schools are guarded by electronics alarms and the tenth school soon will get protective equipment. In addition, 11 grammar schools now are monitored by detection devices.



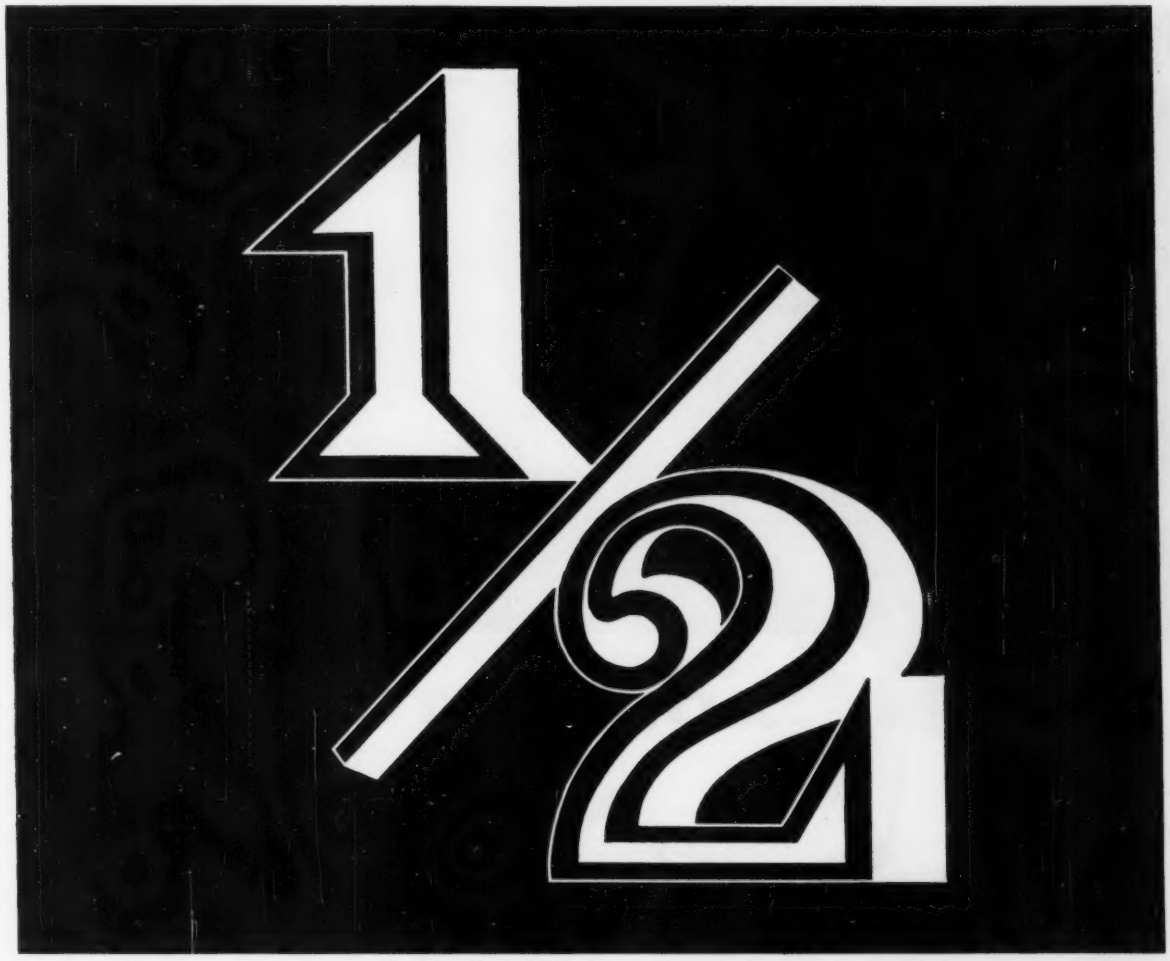
Left, an alarm and signal policeman points to a transmitter. Below, he checks the equipment installed in a closet adjoining the principal's office which controls the burgular detection system.

— Walter Kidde & Co.

Loss and Damage Minimized

Since December, 1958, 47 school break-in alarms have been received. Twenty-four of the alarms resulted in the capture of 81 people. In the other 23, the prompt arrival of investigating officers resulted in minimum or no damage or loss even though no intruders were apprehended.

Mr. Bagwell sums up the protective program this way: "We have slashed losses, the result of malicious vandalism or thievery. Second, it appears that the break-in frequency rate is dropping as news of 'captures' has circulated through Dayton. Finally, as we lease the detection equipment and monitoring service, we have no capital expenditure to make for the protection, and the total annual cost runs only a fraction of our previous yearly loss!" ■



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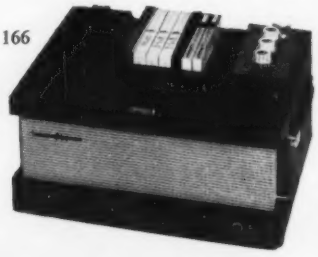

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NEW BOOKS

Yearbook of School Law, 1960

By Lee O. Garber. Paper, 184 pp., $3. Interstate Printers and Publishers, Danville, Ill.

The eleventh in this series of Yearbooks of School Law, the 1960 edition presents the most important decisions of the past year dealing with schools and school districts. A supplementary chapter lists and describes six significant cases decided during the year. A number of new features have been added, including articles on (1) "A Decade of School Law," by Marshall J. Tyree, (2) The Schoolman's Federal Income Tax Return, (3) an annotated bibliography, (4) excludable sick pay.

A Citizens Manual for Public Schools

By Mortimer Smith. Paper, 95 pp., $1. Council for Basic Education, Washington, D. C.

This book argues that public schools should adopt the philosophy of "basic education" and limit its program to the intellectual development of the child. It condemns every aspect of life adjustment as found in the progressive education idea. The solution to the problem of boards of education, possible under our laws, it would seem lies between these extremes. The capter of the book on "difficulties of a board of education" has some significant wisdom on the current theory of school administration and the failures of state legislation.

The Supreme Court and Education

Edited by David Fellman. Paper, 120 pp., $1.50. Bureau of Publications, Teachers College, Columbia University, New York, N. Y.

Thirteen important decisions of the U. S. Supreme Court relating to (1) education and religion, (2) racial segregation, and (3) academic freedom.

Interaction in Learning: Implications for Television

Paper, 64 pp., $1. National Education Association, Washington 6, D. C.

This is a report of a national seminar, conducted early in 1959, which sought to train teachers, administrators, and others in adapting TV programs to classroom use. The report presents conditions within the learning situation, describes kinds of interaction, and asks how much interaction is necessary. The second half of the report suggests ways in which the lack of feedback may be overcome or circumvented in order to increase TV effectiveness.

How to Create a Better Understanding of Our Schools

By Daniel Ungaro. Cloth, 112 pp., $3. T. S. Denison & Co., Minneapolis 15, Minn.

The author points out that education must be explained, interpreted, and shared. In the parlance of the day, we must provide a rocket of school interpretation. The main plea is that educators shall provide the light of understanding through an ongoing, continuous program of interpretation. There is need today, he says, for increased housing, materials, and personnel to match the growth in school population and needs.

When Children Move From School to School

Paper, 33 pp. Association for Childhood Education International, Washington 16, D. C.

Nearly six million children, aged five to thirteen, are involved annually in the removal of their parents from one home to another — from one school to another. The present book discusses the problems of adjustment — to cause the least loss to the child. Definite recommendations are made to both schools and to parents to make the transition less unhappy.

Proceedings of the Association of School Business Officials, 1959

Prepared by Charles W. Foster, executive secretary. Cloth, 448 pp. Published by the Association at 1010 Church St., Evanston, Ill.

This is the forty-fifth annual report of the Association, giving the addresses and proceedings at its recent convention in Miami Beach, Fla., October 11–15, 1959.

The Services of an Architect in School Building Planning

Paper, 4 pp. American Institute of Architects, Washington 6, D. C.

This is the 38th report by the Joint Architectural Advisory Committee for the board of education of Montgomery County, Md. The report brings out the fact that all architectural services cannot be performed by a single individual. An architect must call upon the resources of others: engineers — structural, mechanical, electrical, acoustical, and civil. Except in a few cases, the architect pays for these services out of his own fee. While the architect shares his work with many, he carries by far the greatest responsibility. It is his duty to see that the joint endeavors of all have but a single purpose — service to the client.

Instrumental Music Room Designs, Construction and Equipment

Paper, 135 pp., $3.50. American School Band Directors' Association, Seymour Okun, 17367 Pinehurst Street, Detroit 21, Mich.

This booklet contains a series of floor plans of instrumental music rooms that were collected from members of the American School Band Directors' Association and submitted at the 1958 convention at Joliet, Ill. The designs are from high schools throughout the United States.

Other chapters in the book deal with noise reduction and sound insulation and music room equipment.

The Manual Portable Typewriter as an Instructional Tool

Paper, 42 pages. Published by Royal McBee Corporation, Port Chester, N. Y.

This report which presents the results of a year's study of utilizing the portable typewriter as an instructional tool in classrooms, was made possible by grants from three universities — Boston University School of Education, Columbia University's Teachers College, and the University of Illinois College of Education. Some 900 pupils participated in the research which was conducted in 36 classrooms of 14 schools in seven cities.

The study revealed that the use of the typewriter in school subjects varies widely in accordance with the number of typewriters available. It was suggested that the pupils use the typewriter as they would a pen or pencil and that it be used in spelling, geography, history, science, and compositions. The pupils thoroughly enjoyed using the typewriters and preferred them for written work.

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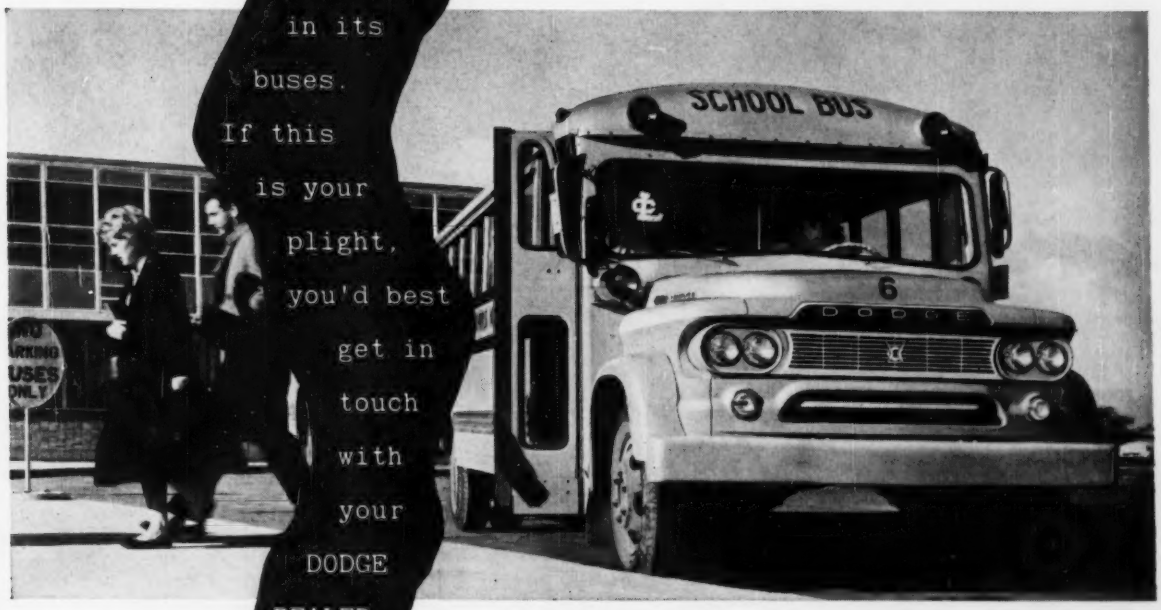

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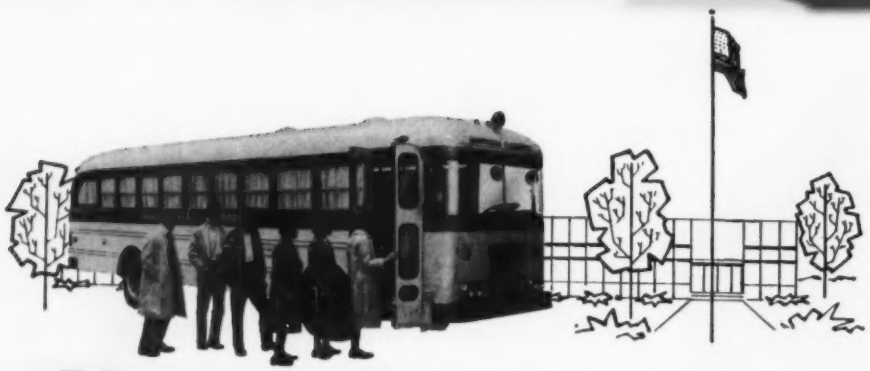

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Now it is possible to extend to high schools graduating *less than 150* students the same high level of driver education afforded larger schools equipped with the Aetna Drivotrainer classroom system—and at the same savings in teachers, time, and teachers' time!

Drivotrainer, the precision electro-mechanical training device that permits students to "drive" through all kinds of situations *before* actually going on the road, has been adapted to a "classroom on wheels"—a bus fully equipped with a six place training unit. By scheduling instruction at proper intervals, two, three or even more schools in a district can utilize the mobile Drivotrainer bus. In this way, these important advantages accrue to each school:

Teachers can train more students. Drivotrainer multiplies the number of students that can be taught, *without* increasing the teaching staff. Hours needed for dual-control on-the-road instruction can be *cut in half.*

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All of these combined can only result in LOWERING THE COST OF PER-PUPIL INSTRUCTION WITHOUT INCREASING THE TEACHING LOAD!

Rockwell extends service to schools by manufacturing and distributing the Drivotrainer system which was developed as a public service by the Aetna Casualty and Surety Company. Working closely with a panel of nationally known educators, Aetna invested considerable time, effort and funds in perfecting the Drivotrainer system. With its effectiveness fully documented by responsible educators, the Drivotrainer is in use in schools, as well as in driver re-training programs.

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Components of the Drivotrainer are the cars, training films, recorder and projector. Six stationary cars are equipped with all essential instruments and controls, simulate motor noise, clutch "friction point" and brake pedal "feel." Recorder imprints individual student reactions on master score sheet through electrical connections between cars and recorder. Development of manipulative skills, habits and acquaintance with basic traffic patterns is provided in an atmosphere conducive to learning—and at no risk to life or property.

Real test of driving ability is the individual's response to emergency situations. Reaction must be *instantaneous* and *correct!* Conditioning the proper reflex action is done through the use of a series of specially prepared training films. The Drivotrainer equipment is set to permit the instructor to stop the film at any point for discussion and review, and repeat emergency situations until satisfactory level of performance is achieved.

DRIVOTRAINER

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THE SCHOOL SCENE

(Concluded from page 8)

port of the U. S. Office of Education.

It is reported that expenditures by colleges and universities for day-to-day activities rose 29 per cent from $3.5 billion in 1955–56 to $4.5 billion in 1957–58.

The total expenditures for additions to plants totaled $686 million in 1955–56, and $1.1 billion in 1957–58. Altogether, $3.6 billion was spent for educational purposes at the 1940 institutions included in the survey. This figure is 30 per cent above the 1955–56 level.

MUST SUBMIT DESEGREGATION PLAN

The U. S. Fifth Circuit Court of Appeals, in New Orleans, La., on March 11, ordered the school board of Dallas, Tex., to submit a public school desegregation plan by May 1.

Appellate Judges Richard Rivers and John Minor Wisdom held that the school board must act on a lower court order modified to require the board to make a prompt and reasonable start toward full compliance with the Federal District Court decision of April 16, 1958. School district officials argued that they were unable to take immediate steps toward desegregation because of Texas law, which would cut off about $2,7000,000 annually in state funds. The law also provides penalties for any member of a school board that acts for desegregation.

OFFERS REPLACEMENT PLAN FOR EDUCATIONAL TV SETS

An annual replacement plan for educational TV sets is being offered to school authorities by the General Electric television receiver department.

Labeling "open circuit" broadcasting "the most practical approach" to suplying the growing needs of educational television, General Electric proposes to supply schools with standard receivers at minimum cost and avail the school of the opportunity to update receivers each 12 to 18 months on a replacement basis.

General Electric claims these advantages for the "open circuit" system: stations can cover all schools up to 80 or more miles from the transmitter (costs could be assessed against many school districts); standard receivers on assigned channels can be used without modification; additional values in the field of adult education are realized and it is the least costly system in terms of total investment, since only a master antenna is needed in addition to the receivers.

BROCHURE ON SCHOOL EQUIPMENT

"In certain instances the most efficient way of procuring equipment may be through establishing budget amounts in the building construction specifications," according to a brochure, "Getting More Value For Your School Dollar," published by the School Facilities Council.

Among recommended procedures for specifying and procuring "fixed" educational materials in this booklet are: prequalification of bids; allowances; base bid with specific alternatives; and pre-filed sub bids.

Copies of the leaflet are available from the Council at 247 Fourth Avenue, Mount Vernon, N. Y.

LANGUAGE ADVISORY COMMITTEE APPOINTED

Commissioner of Education Lawrence G. Derthick has appointed a 12-member national advisory committee to assist the Office of Education in its program for improvement and extension of foreign instruction in schools and colleges. The committee will be concerned with the language development program, authorized by Title VI of the National Defense Education Act. The program includes institutes for teachers of foreign languages, and centers for improvement of instruction in languages not taught in the United States.

SCHOOLS STRIVE FOR PRODUCTIVITY

A report in Architectural Forum on the reorganization of schools urges the abandonment of the standard "eggcrate" classrooms of 25 to 35 seats. In their place would be large discussion groups of 100 or more students, small college-like seminars and increased individual study in more private quarters.

Gymnasiums, which are expensive for the amount of time they are in use, can be made more economical by being built divisible into smaller everyday teaching spaces easily darkened and ventilated for audio-visual use. Or the auditorium can be eliminated altogether, and "little theaters" and lecture rooms can be used instead.

In the push toward higher productivity, schools are trying a variety of techniques. Some trends:

Better management methods are showing schools how to consolidate their teaching talent as well as their books and equipment.

Business machines and computers are coming into use not only for school business records but also to keep pace with growing complexity of short-period and individual scheduling, tests, and grading.

TECHNICAL ELECTRONICS

(Concluded from page 27)

classes would not drop below a level detrimental to the future of the program. In a district where the public eye is always on the budget, this, too, makes a good impression. No new pupils are added to a program of this type in the middle of the school year. Therefore, proper class size level may not be maintained.

While good facilities and students with a high degree of potential are essential elements of any technical program, the key individual who will ultimately determine the success is the teacher. He must not only have the technical background to provide the children with the latest and the best in scientific information but he must have those desirable personality characteristics that would motivate students to greater efforts and create an interest in the subject matter that is being studied. When interviews are carried on, the candidate's ability to teach and his ability to get along with pupils become dominant factors in the final selection.

There are many course of study available in the various areas of technical education, but rapid advances made it necessary to evaluate the material each year to determine whether it has become outmoded in its industrial application. A tentative course of study was written and based, in part, on existing courses of study and their feasibility in terms of our present equipment. As each lesson is given, it is evaluated, checked for student understanding, and placed within the total course of study. When the present list of laboratory sheets and teacher demonstration lessons have been completed, they will be submitted to local industry and state offices for their evaluation and comment.

The entire technical program is organized within the complex of a comprehensive general high school. Academic subjects are taken with the regular students pursuing a college preparatory curriculum. As was previously indicated, the pupils have a nine-period day, which is longer than the other students in the district. This presented a special problem of transportation since their dismissal was not at the regular hour. However, this was easily overcome.

The curriculum for the technical electronics program included: four years of English, four years of citizenship education, four years of high school mathematics, four years of science, three years of a foreign language, three years (2 periods per day — 1½ hours) technical electronics, and four years of physical education.

Photo courtesy of Mel Warshaw, Inc., Miami (creators of Jay Originals and Trend-Setter fashions)

WORD FROM WASHINGTON

(Concluded from page 44)

to what constitutes a fair share of responsibility for meeting the goal on the part of government at all levels and on the part of private contributors."

"And, in this connection," he added, "there is no doubt in my mind but that the Federal Government must assume a larger share of the total responsibility than it is now assuming."

Other Federal Financing Urged

But education was not the only field for which increased federal financing was advocated.

In summarizing the proceedings, Ruth Stout told the delegates there were at least 18 resolutions seeking government aid at state and federal levels on problems affecting young people besides education. As examples she cited long-term, low-interest loans for migratory workers; unemployment compensation; public and private housing; and state sharing in provisions for social services.

"In resolutions calling for Federal assistance," she continued, "the Conference is not just asking the Government to provide something that localities can get for themselves." She ascribed this delegate action to "recognition of the fact that the Federal Government now collects 75 per cent of all taxes" saying there needs to be "a reorganization of the tax structure and distribution of funds" in order to support programs which have quality.

Strengthening Family Life

Auguring well for the future was the recognition that the participants gave to the family as the center of the welfare of children and youth and its stabilizing influence in the development of wholesome attitudes.

This subject received attention not only at Work Group and Forum sessions but at a special evaluation meeting of the youth delegates to the White House Conference. Voting by "Buzz Groups" composed of six persons, and not as individuals, the young people approved the following resolution as one of three "top priority" goals for the coming decade, the other two highlighting civil rights and increased local, state, and Federal support for education:

> Recognizing the disintegration of the family unit in American culture, we call for a re-emphasis of the family unit as a central force in democracy through education of youth in the role of the family both within the family circle and in the schools, facilitation of communication between adults and youth, and a recognition by community organizations that they must supplement and not compete with the family.

Some Other Emphases

The Conference, moreover, placed heartening emphasis on the significance of moral and spiritual values in American life and the importance of children and youth finding a personal religious faith.

The delegates also affirmed that we must dedicate ourselves to the unchanging values and beliefs that give meaning to American life stressing that if the values of our society are to prevail they must be communicated to our young people. As one Conference spokesman put it, the resolutions on citizenship "were not of the flag-waving variety but reflected what the flag symbolizes."

Evaluations

The adoption of the individual resolutions by a voting body that was generally under 400 delegates due to the division of the Conference membership into 18 separate Forum groups, each of which considered a different set of findings, raised questions as to what the adoption of particular recommendations really signified. At no time were the resolutions voted on by the entire delegate body.

Some of the delegates regarded the approved proposals as more of a reflection of pressure group attitudes than a representative cross section of American opinion. There were complaints, too, by some who contended that the speakers at Theme Assembly and Forum meetings were overweighted with spokesmen for national organizations and minority groups with the result that their presentations too often were a reflection of organization thinking instead of individual thought.

But there were others who maintained that the Conference process had erected guideposts for ten years of citizen action in carrying out the Golden Anniversary goal ***"to promote opportunities for children and youth to realize their full potential for a creative life in freedom and dignity."***

Pointing up the diversity of viewpoints expressed at the Conference are these contrasting criticisms of two Theme Assembly speakers.

Asserting that "White House Conferences have produced far less results than are possible and reasonable in relation to the enormous investment in good will and money that we make in them," William G. Carr, the secretary of the National Education Association, attributed this in part to "their enormous scope" . . . (with the result that) "the conferences have become so comprehensive that nothing is excluded that has any relevance, however remote, to the well-being of children and young people" and to their failure to speak out boldly "on those types of controversial questions on which action has to be taken."

The Rev. Philip A. Potter, executive secretary of the Youth Department of the World Council of Churches in Geneva, however, protested that the Conference's outlook was too narrow, claiming that instead of concentrating on the problems of American children, it should have focused on the needs of children throughout the world.

It is hoped that the State Committees on Children and Youth will continue to function and become centers of leadership in putting Conference recommendations to work. ■

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(For more information from advertisers, use the postcard on page 65)

NEWS of PRODUCTS for the schools

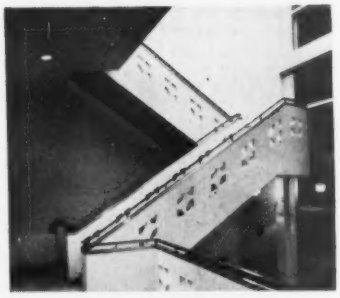
PREFAB PANELS IN COLOR

Aluminum and galvanized building panels for both pre-engineered and custom construction are now available in a variety of factory-applied colors. Developed by Butler Mfg. Co., Kansas City, Mo., the Butler-Tone panels have a baked-on, synthetic resin finish, factory applied over the aluminum and steel. After finishing, the metal is then shaped, punched, and sheared to form either insulated or noninsulated exterior panels. Galvanized steel panels are available in gray, tan, green, and white; aluminum panels are supplied in these colors and also in cream and terra cotta. Interior faces of all noninsulated panels are finished in off-white. Send for complete information.

(For Further Details Circle Index Code 075)

METAL LATH STAIRWAY

Metal lath and plaster were used in this unique balustrade which forms a three-story, fire-resistant stairway for the new Wood, Wire and Metal Lathers' International Union Building, in Takoma Park,



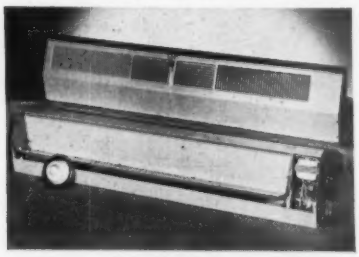
Fire-Resistant Stairway

Md. A similar design could be adopted in remodeling stairwells in older schools. Metal lath is so placed that the lower sheet laps over the upper sheet. Plaster is applied over the lath, and painted white. Galvanized corner beads edge the cutouts, the top is capped with stainless steel, and a mahogany rail is attached. The flooring is terrazzo. Details are available from Metal Lath Mfgrs. Assn., Cleveland 14, Ohio.

(For Further Details Circle Index Code 076)

BASEBOARD AIR DIFFUSER

An automatic baseboard diffuser that saves from 20 to 30 per cent on fuel consumption and up to 30 per cent on cooling



Corrects Temperature Extremes

equipment is available from Control Systems Co., Milwaukee, Wis. The manufacturer recommends the diffuser for rooms that tend to be unduly hot or cool in schools, institutions, and homes; and for counteracting the effects of sun and room occupancy. It can be installed in new or existing perimeter warm air heating or cooling systems without any major changes or alterations. The low-cost unit consists of an automatic damper operated by a noiseless, thermostatically-controlled, 24 volt electric motor. Unit is easily installed and fastened over a supply boot.

(For Further Details Circle Index Code 077)

INSECT-PROOF PAINT

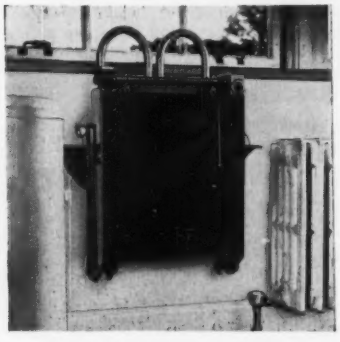
Consolidated Paint & Varnish Corp., New York 17, has released a new insecticide paint which, they report, will make any building or room permanently insect-proof. The product combines a new alkyd paint wall finish with recently developed insecticides. Called Kil-Sect, the protection lasts

as long as painted surfaces are undisturbed. The paint can be scrubbed with no affect on its power as an insecticide. Odor of the paint is not offensive. It is ideal for kitchens and washrooms. When an insect touches the Kil-Sect covered surface, it dies. Yet, there is no danger to children or pets. The manufacturer states that it is completely safe for humans. Color chart and technical data available upon request to the manufacturer.

(For Further Details Circle Index Code 078)

FIRE ESCAPE LADDER

An Emergency Fire Escape ladder for multi-story buildings is manufactured by Marryatt, Lane & Co., Inc., Fort Lee, N. J. The device folds compactly beneath a window sill. It opens to a sturdy safety platform crossing the window sill, with safety rails for the individual to grab before descending the link chain ladder. The ladder can be fastened at the bottom to prevent swaying. The lightweight unit is made of extruded aluminum shapes and nonskid aluminum plates, suspended on a stainless steel shaft. It requires no maintenance, is easy to install, and has a low initial cost.



Folds Close to Wall

(For Further Details Circle Index Code 079)

CORK IN 16 COLORS

Color-Cork, offering unlimited applications for walls, floors, and bulletin boards, has been developed by Gotham Materials, Inc., New Rochelle, N. Y. The cork is offered in a range of 16 pastels and deep shades. Rolls are available in lengths up to 90 ft., and widths of 36, 42, 48, and 78 inches. The material is also offered in square tiles of 6, 9, 12, and 18 inches. Rolls and tiles both can be ordered with ⅛- or ¼-in. thicknesses. Cut orders of any dimensions in widths up to 78 in, are also offered. Send for complete details.

(For Further Details Circle Index Code 080)

SELF-CORRECTING CLOCKS

A new clock system with a 12-hour corrective range has been announced by Cincinnati Time Recorder Co., Cincinnati, Ohio. It synchronizes and corrects all secondary clocks and time clocks once each hour, plus a 12-hour correction twice a

(Continued on page 62)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

(For more information from advertisers, use the postcard on page 65)

News of Products . . .

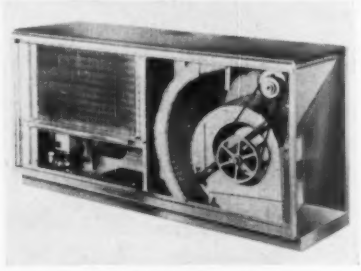
(Continued from page 61)

day, thus providing the widest possible corrective range. In the system all clocks can be set to the correct time at any period of the day from a central location. The new system can operate time recorders without an auxiliary relay device, as well as time stamps and program controls. Since the new system is a two wire impulse type, operating on 24 volts D.C., it has no continuously moving parts, thus reducing maintenance to a minimum.

(For Further Details Circle Index Code 081)

WET HEAT FOR SCHOOLS

A new hot water heating unit for school classrooms was made recently by Lennox Industries, Inc., of Des Moines, Iowa. Known as the DVW2-1200, the unit includes a hot water coil of copper and aluminum; and automatic dampers for mixing heated, recirculated, and ventilation air.



Contains Blower Unit

The unit also has a blower for even distribution of the air throughout the classroom via the Comfort Curtain system of bookshelf or wall ducts. This unit, now going into production, adds wet heat to the Comfort Curtain warm air heating system for school classrooms. A similar air processing unit known as the DVS2-1200 will also be available for use with a central heating system using steam.

(For Further Details Circle Index Code 082)

LANGUAGE TAPE MAGAZINE

The Magneticon Tape Magazine designed and produced by Magnetic Recording Industries, Ltd., New York 11, eliminates threading errors and tape damage. The magazine is equipped with 600 ft. of tape on integral hubs. Easy to use, the maga-

Eliminates Tape Threading

zine merely slips into the guide slots. When the end of the reel is reached, the unit automatically shuts off. It provides maximum protection for master lessons or copies for students use. Send for complete details.

(For Further Details Circle Index Code 083)

(For more information from advertisers, use the postcard on page 65)

ELECTRONIC LANGUAGE LAB

An electronic language laboratory with transistorized components has been especially designed for educational use by the DuKane Corp., St. Charles, Ill. The Medal-

Transistorized Components

lion system, exhibited at the A.A.S.A. convention recently, is a complete laboratory facility, including instructor's console, insulated all-metal student booths, and all the necessary electronic components. Equipment is modular so expansion and modifications of the facilities are both practical and inexpensive. The transistorized circuits are "whisper quiet," for ultra-high sound fidelity, according to the makers, and convenient plug-in components simplify inspection and maintenance. The teacher's desk (pictured) contains simple controls by which 50 students, individually or in groups, can converse and learn. Master recordings on as many as four tape players are located in the pull-out sections of the console.

(For Further Details Circle Index Code 084)

TAPERED LEG CHAIRS

The No. 210 Academy Series chair from General School Equipment Co., St. Paul, Minn., features tapered legs designed to increase the chair's stability and balance. Rear legs are extended back and outward to protect walls from scrapes and scuffs. Cross-designed, tubular steel understructure

Increased Balance Design

is welded at five points for extra sturdiness. The chair has a Bodytone seat and back with an optional bookrack offered in matching color or chrome. Write for complete details.

(For Further Details Circle Index Code 085)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

COMBINATION FINISHING MACHINE

Delta Power Tool Div., Rockwell Mfg. Co., of Pittsburgh, announces a new combination belt and disc finishing machine capable of performing up to 90 per cent of all shop refinishing operations. The machine has a standard 4-in. abrasive belt and 12-in. abrasive disk designed for efficient, economical finishing. Particularly suitable for school shops, it can handle finishing operations on wood or plastic; and surfacing or polishing steel components, grinding, die castings, aluminum, brass and copper parts, and other materials. It can also be used to sharpen tools. The low-cost machine has many outstanding features. Send for full details.

Versatile Finishing Machine

(For Further Details Circle Index Code 086)

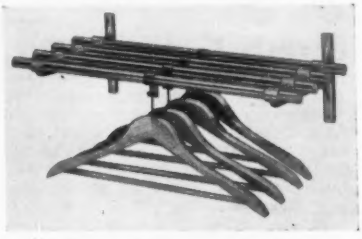
NEW MOUNT FOR PENCIL SHARPENER

A new mounting attachment permits a pencil sharpener to be affixed to glass, stone, or metal surfaces so prevalent in today's modern schools. Made by The Joseph Dixon Crucible Co., Jersey City, N. J., the product is named Any-Mount. A metal plate that serves as a base for Dixon Endro No. 20 sharpener, is held to the surface by a bonding agent. It will hold the sharpener tightly to any stable surface. The company also offers a new folder on "How to Service and Repair Your Pencil Sharpener." Send for a free copy.

(For Further Details Circle Index Code 087)

COMPACT HAT AND COAT RACKS

Vogel Peterson Co., Elmhurst, Ill., has developed a new wall mounted coat and hat rack for shallow or confined areas. The compact rack can be used behind doors and in small closets. The unit hangs parallel to supporting wall and projects out only eleven inches. Coats are held four deep and spaced apart. Standard in size and shape, the hangers have hookless attachments which slip into fixed receptacles, permanently attached to the hat shelf. The hat shelves are formed of parallel aluminum tubes, rigidly held in cast aluminum wall brackets. They are offered in lengths two ft. and longer.



Stores Without Crushing

(For Further Details Circle Index Code 088)

CATALOGS AND BOOKLETS

"Specification Manual of Plumbing Fixtures and Specialties for Institutional Kitchens" is available from **T&S Brass and Bronze Works, Inc.**, Westbury, L. I., N. Y. The looseleaf manual was designed to help architects, food consulting engineers, and kitchen planners to analyze and specify all kitchen plumbing requirements.

(For Further Details Circle Index Code 089)

Controlling traffic at school crossings is a serious problem. Bulletin 2716 from **Crouse-Hinds Co.**, Syracuse 1, N. Y., describes a school signal system with pushbutton electronic controls. Send for a free copy.

(For Further Details Circle Index Code 090)

Vertical Blinds Corporation of America, Los Angeles 25, offers a pamphlet to help answer school window covering problems. The illustrated literature includes sections on audio-visual blinds, light control, air control, heat reflectivity, and maintenance savings.

(For Further Details Circle Index Code 091)

The 1960 Asphalt Tile Color Classification Chart compares the latest marbleized, terrazzo, and cork patterns from leading manufacturers of asphalt tile flooring. Single copies are free from the **Asphalt & Vinyl Asbestos Tile Institute**, New York 17, N. Y.

(For Further Details Circle Index Code 092)

Marcolite Aluminum and Fiberglass Skylight products are described and illustrated in the 1960 catalog from **The Marco Co.**, East Orange, N. J. All models and designs are included and two major installations are illustrated. Copies free upon request to the manufacturer.

(For Further Details Circle Index Code 093)

MANUFACTURERS' NEWS

Library Binding Institute will hold its 1960 convention on May 10 to 12, at Writers' Manor, Denver, Colo. Among the many subjects to be discussed are standards, public relations, annual scholarship and Silver Book Award, cost studies, and industrial statistics.

USE THESE CARDS

The cards below are for your convenience in requesting product information, catalogs,

READER'S SERVICE SECTION

INDEX TO SCHOOL EQUIPMENT

The index and digest of advertisements below will help you obtain free information, catalogs, and product literature from the advertisements and companies listed in the new products section. Merely encircle the code number assigned to each firm in the request form below, clip the form and mail it to THE AMERICAN SCHOOL BOARD JOURNAL. Your request will receive prompt attention.

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AMERICAN SCHOOL BOARD JOURNAL

P.O. Box No. 2068

MILWAUKEE 1, WISCONSIN

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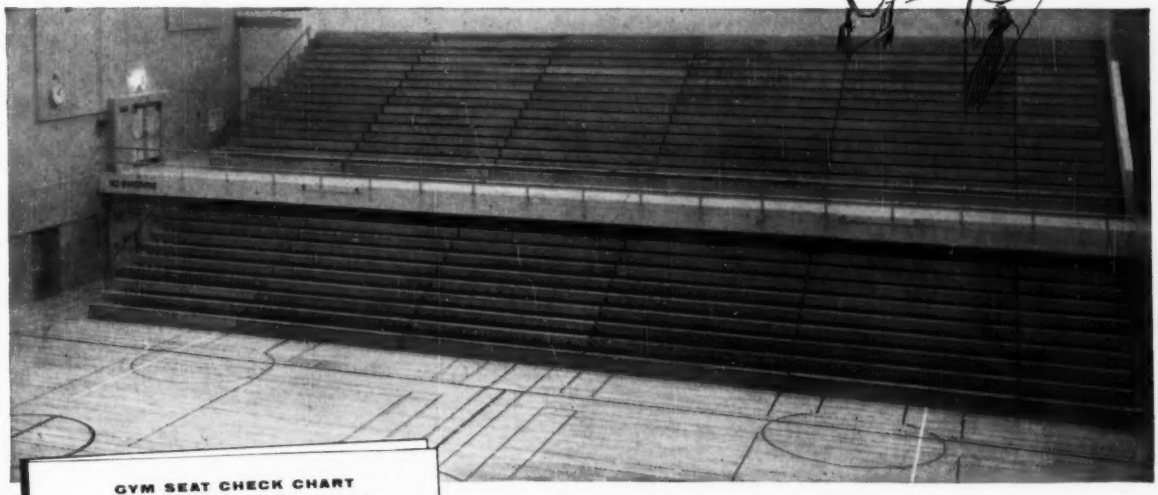
READER'S SERVICE SECTION

(Continued)

WHAT DO YOU WANT besides price when you specify or buy GYM SEATS?



GYM SEAT CHECK CHART

An easy "Do-It-Yourself" scorecard for comparing the deciding features of various makes of bleacher-type gym seats.

Check these important design and construction factors before selecting any gym seats whether they be folding or stationary, to obtain the maximum in safety, service, easy and convenient operation and minimum maintenance.	Enter the names of gym seats under consideration and mark YES or NO in spaces provided				
					MEDART
1 Are fronts of seats perfectly vertical when closed to safeguard against accidents and to prevent "flesh pinching"?					
2 Do seats operate on a telescopic principle completely free of folding members? See Fig. 2					
3 Are seats designed and constructed independent of (unlike some multiple leaning levers and pins)? See Figs. 1, 2, 3 & 4					
4 Is steel understructure free standing and self supporting independent of wood seats, risers and footboards? Wood members should add to strength of understructure, and have no structural duties. See Fig. 1					
5 Has each full length seat row at least four vertical uprights to support a capacity load in complete safety? See Fig. 1					
6 Are uprights properly staggered to avoid overloading of standard flooring? See Fig. 1					
7 Are uprights interlocked at top and bottom to insure rigidity (no two bending opening and closing)? See Figs. 2 & 3					
8 Are all supporting uprights equipped with two primary (anti lubricated) rubber steel rollers? See Fig. 4					
9 Are seats enclosed in steel housings as an extra precaution against possible accidents and to protect against an excessive accumulation of dust and debris? See Figs. 1 & 2					
10 Do seats retract into steel housings when seats are under live load so seats are locked safely in position? See Fig. 4					
11 Are front risers equipped with two non-slip rubber pads to lock seats in safe position? See Fig. 6					
12 Is each seat board stacked slightly backward for maximum comfort?					
13 Do wood members have an oven-dried, manufacturer's applied all-of-molecular varnish finish which has many times greater wear resistance than ordinary gym seat finishes					
14 Can any number of seat rows be opened and safely locked in position for use while all others remain closed? See Fig. 6					
15 Do seats occupy minimum floor space when closed?					
16 Can seats closed be located per your requirements without alterations to room boards?					
17 Can seats be equipped with automatic hinged toe rests to prevent lodging of feet/heels, etc.?					
18 Are movable seats equipped with an integral hydraulic lift which is concealed and operated at the floor?					
19 If seats are to be power operated, is power unit of protective action type, completely free of floor friction drives?					

Courtesy of FRED MEDART PRODUCTS, INC., 3578 DeKalb Street, St. Louis 18, Mo.

GET YOUR COPY

A gym seat check chart that will help you in making impartial comparisons of features and values. No obligation—just MAIL THE COUPON.

GREATER SAFETY? **Medart seats have it—compare them with others! Self-supporting steel understructures, *plus added strength* of wood members, support over 400 pounds per foot of seating space.**

Four dual *vertical* uprights for *each* 16′0″ seatboard. Two rollers on each upright retract and place load on floor, not walls or casters.

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